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Vegetable Seed Trials D. N. Shoemaker

# OUR SPECIALTIES For Your Greenhouse Crop

The Grand Rapids Forcing Varieties are known and used in all parts of the United States and Canada as well as foreign countries including England, France, Germany, west coast of Africa, Australia, etc., by leading greenhouse vegetable growers and market gardeners who have found them to be the best in their class and acclaim their praise. If you are still unfamiliar with their merits we would suggest that you send us a trial order. Below we give you a partial description, but the complete text will be found in the pages referred to in this catalog. We solicit your patronage. All mail orders are filled on the same day they are received.

### Lettuce

Grand Rapids Forcing (Washington Strain). A splendid forcing strain. Color a light green, heads very heavy: leaf crisp, tender and curly; quality of the best. Complete description will be found on page 14. Price, oz., 25c; 1/2 lb., 75c; 1 lb., \$2.50, postpaid.



# Radish

Grand Rapids Forcing The best green-house variety and the earliest. Has a very tender skin and will not stand heavy forcing. Very hand-some, with the shortest top. Full descrip-tion will be found on page 20. Price, oz., 10c; 1/4 Ib., 30c; 1 Ib., \$1.00, postpaid. Grand Rapids Forcing Lettuce.

# Tomato

Grand Rapids Forcing Radish.

Grand Rapids Forcing The intense sex-ual vigor of the plant causes a great production of pollen and insures an immense setting of fruit. Forcing Radish. and insures an immense setting of fruit. It is self-fertilizing. The fruit is a good red color, fair size, firm and meaty. The skin is tough and it will stand shipping for long distances. The entire descrip-tion will be found on page 24. Price, oz., \$1.50; 1/4 lb., \$5.00; 1/2 lb., \$8.00, postpaid.

Grand Rapids Forcing (Select Growers Strain). A superior Tomato, larger in size, better quality as well as flavor. Detailed description will be found on page 24. Price, oz., \$2.00; ¼ lb., \$7.50; ½ lb., \$12.50, postpaid.

# Cucumber

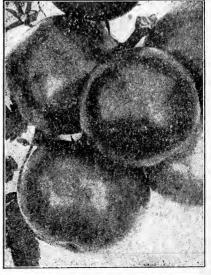
Grand Rapids Forcing (Improved Strain). A white spine selection. Long, slender, dark green variety. It is an ideal forcing Cucumber and will breed true to type. Full description will be found on page 12. Price, oz., \$1.50; ½ lb., \$5.00; 1 lb., \$15.00, postpaid.



### Seed Merchants

Grand Rapids

Michigan



Grand Rapids Forcing Tomatoes.

### **1930** PLEASE USE THIS ORDER SHEET

# GRAND RAPIDS GROWERS, Inc. Grand Rapids, Michigan

#### Please Forward the Following to

(Write name and address very plainly.)

#### How to Send Remittance

Never send Bills or Currency in a Letter. If necessary to do so be sure to REGISTER IT. The safest form of remittance is a Check, Post Office or Express Money Order.

Post Office		The safest form of remittance is a Check, Post Office or Ex- press Money Order.
R. F. D. No. Box No.	Street	AMOUNT ENCLOSED
Express Office		Date
		P. O. Order
Freight Depot		Express Order
County	State	Check or Draft
		Cash
HOW SHALL WE SHIP?	State on this line whether by Mail, Express or Freight	Stamps
If to be sent by Mail be sure to include Postag	re on goods not quoted postpaid. See first	Total

GRAND RAPIDS GROWERS, Inc. gives no warranty, express or implied, as to description, purity, productiveness or any other matter of any seeds, bulbs or plants they send out, and they will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are to be re-

Quantity	NAMES OF ARTICLES WANTED	Price
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THIS LINE

Name .....

IF MORE ORDER BLANKS ARE WANTED, WRITE US AND WE WILL SEND THEM. MAIL ORDERS ARE SOLICITED.

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#### **ORDER SHEET**—Continued

**SPECIAL NOTICE:** 

We shall esteem it a great favor if you will give us in the spaces below the NAMES AND ADDRESSES of any Private Gardeners or Truck Farmers among your acquaintances. We wish to send them our SEED ANNUAL

NAME	POSTOFFICE	COUNTY	STATE
· · · · ·			

# **Grand Rapids Growers, Inc.**

Eleventh Annual Seed Catalog

1930

# Important

By Carefully Following These Suggestions, Many Mistakes Will Be Avoided

#### **Order Blanks**

Order blanks have been inserted in this catalog for your convenience. Please use them. Fill in your NAME, POST OFFICE, SHIPPING POINT or nearest EXPRESS OFFICE, your COUNTY and STATE, as this is as important in the prompt filling of your order as the order itself. Write plainly and avoid mistakes.

#### Terms

Our terms are strictly CASH, and we ask that you enclose your remittance with the order. Unless your remittance is enclosed we will send your order C. O. D. and the charges will be added, but as the fee and cost of collecting seems to be an unnecessary item of expense, we cannot conceive why it is necessary to send goods in this way.



#### How to Send Money

Remittance should be made by Postal Money Order, Express Money Order, Bank Draft or Certified Check. It is perfectly safe, and your order will be assured of prompt handling. If currency is sent the letter should be "Registered."

#### **Postpaid Prices**

We prepay postage on all vegetable and flower seeds in packets, ounces, quarter pounds, half pounds and pounds at the prices quoted herein to any point of the United States or any of its possessions, and Canada, however, we do not pay postage on beans, corn, or peas beyond the "one pound" price; field seeds, onion sets, miscellaneous supplies, or anything that is not specifically listed "postpaid". If such items are wanted by Parcel post, add sufficient postage as per Parcel Post Rates given on this page.

#### **Small Orders**

Small orders are just as welcome as the larger ones and receive the same careful attention and prompt handling. All orders are filled the same day as received.

#### Large Quantities

Parties buying large quantities of any one variety of seeds will be quoted special prices on application. All prices are net.

#### Price of Seeds By Weight

We will supply HALF POUNDS and over at the pound rate; less than half pound lots are charged at the quarter pound and ounce rate.

#### Safe Delivery

All seeds and supplies sent out by us are fully insured and we guarantee their safe arrival. If there is any damage, notify us immediately.

#### Parcel Post Rates and Weight Limit

The weight limit within the first, second, and third zones is now 70 pounds, and within all other zones 50 pounds. Shipments of 20 pounds or over are cheaper if sent by Express beyond the third zone.

	Ist ID.	Ea. auu.
0	r Frac-	lb. or
	tion	Fraction
1st Zone, within 50 miles of Grand Rapids	7c	1c
2nd Zone, within 150 miles of Grand Rapids	7c	1c
3rd Zone, within 300 miles of Grand Rapid		2c
4th Zone, within 600 miles of Grand Rapids	. 9c	4c
5th Zone, within 1000 miles of Grand Rapids.	10c	6c
6th Zone, within 1400 miles of Grand Rapids.	11c	8c
7th Zone, within 1800 miles of Grand Rapids.	13c	10c
8th Zone, over 1800 miles from Grand Rapids.	14c	12c
Canada, all parts	14c	14c
To be dealed about many and a farmer man		

If in doubt obtain your zone rate from your postmaster.

#### **Non-Warranty**

The seeds offered in this catalog have been carefully grown, selected, cleaned and tested for germination and we believe them to be first-class, but as so many conditions enter into making a crop, we give no warranty, either express or implied, as to description, purity or productiveness, and will not be responsible for the crop. If the purchaser does not accept the goods on these terms, they are to be returned at once, and the money will be refunded.

Grand Rapids Growers, Inc. Seed Merchants

Cor. Wealthy and Ionia Ave., S. W. Grand Rapids, Mich.

# Asparagus

CULTURAL DIRECTIONS. One ounce of seed will sow 50 feet of drill and produce about 200 plants. Drill the seed in rows about eighteen inches apart, covering seed one inch. Cultivate well, keep free from weeds and they should be all right to transplant to permanent beds the following Spring. The soil cannot be made too rich. Use well rotted stable manure or **Pulver**-ized **Hen Manure**, and mix well with the soil. For home garden have the rows two or three feet apart. Make broad trenches about a foot deep and fill in about three or four inches with well rotted stable manure, put two inches of dirt on top of the manure, then set the plants, spreading the roots and cover with an inch of soil. As the plants grow, gradually fill the trenches till the bed or field is level. Do not cut the plants till the third year. Every Fall before the seed is ripe, cut tops and burn them, and give good top dressing of manure. Remember, the bed well planted will last for at least twenty years. Treat it well.

\*Mary Washington Rust-Resistant Asparagus The largest and most tender green Asparagus. This is a decided improvement, over the Pedigreed Washington and Martha Washington, being earlier, larger and longer. The credit for the development of this wonderful, rustresistant strain is almost entirely due to the untiring efforts of Prof. J. B. Norton, member of the Plant Breeding Staff of the U. S. Dept. of Agriculture. Oz., 40c; <sup>1</sup>/<sub>4</sub> lb., \$1.25; 1 lb., \$4.00, postpaid.

Martha Washington (Pedigreed). The original rust-resistant type. A heavy yielding variety with long, thick, heavy stalks, closely folded at the tips; color rich dark green. Oz., 40c; ¼ lb., \$1.25; 1 lb., \$4.00, postpaid.

Palmetto An early maturing and prolific variety with thick dark green shoots, distinctly pointed at the tip. A popular canning variety. Oz., 10c; ½ lb., 25c; 1 lb., 80c, postpaid.

Conover's Colossal A large fast growing green variety, very tender. Oz., 10c; ½ lb., 25c; 1 lb., 80c, postpaid.

Giant Argenteuil The popular variety in the Paris markets; early, exceedingly large and very productive. Oz., 10c; ¼ lb., 25c; 1 lb., 80c, postpaid.

#### **Asparagus Roots**

PALMETTO. One-year-old, \$1.50 per 100; \$12.00 per 1000, not postpaid.

MARTHA WASHINGTON. One-year-old, \$2.25 per 100; \$15.00 per 1000, not postpaid.

CONOVER'S COLOSSAL. \$1.50 per 100; \$12.00 per 1000, not postpaid.



Mary Washington Asparagus.

## Beans

CULTURAL DIRECTIONS. One pound to 100 feet of drill; about three-fourths bushel per acre of Bush Beans. Beans thrive on a rich, warm, light soil. It is not safe to plant until about the middle of May as the seed will rot in cold, wet ground, and the plants will not stand frost. Plant dwarf beans in rows two feet apart and from four to six inches apart in the rows. Lima Beans should not be planted until June first, when the soil is thoroughly warmed through. Limas will rot in cold ground.

#### Wax Podded Varieties

Improved Golden Wax One of the earliest dwarf beautiful golden yellow, tender and stringless. Lb., 40c; 10 lbs., \$3.50; 1 bu., \$18.00.

★ Pencil Pod Black Wax Pods round, very long, ten-der, and entirely stringless. Extremely productive. Best market gardeners' sort. Lb., 40c; 10 lbs., \$3.50; 1 bu., \$18.00.

★ Burpee's New Kidney Wax A more vigorous and prolific grower than Wardwell's. Pods flat, brittle, fleshy, of a rich lemon color, stringless and well flavored. Lb., 40c; 10 lbs., \$3.50; 1 bu., \$18.00.

Prolific Black Wax (Or German Black Wax). The earliest Wax Bean. Pods short, curved, slightly flattish. Lb., 40c; 10 lbs., \$3.50; 1 bu., \$18.00.

Wardwell's Kidney Wax A very popular early garden-er's variety. Pods large, 51/2 to 6 inches, moderately stout, straight and flat, fleshy, brittle, fine grained and nearly stringless. Of good quality and very attractive. Lb., 40c; 10 lbs., \$3.50; 1 bu., \$18.00.

Davis Kidney Wax Seed white, pods very long, flat, straight, white, waxlike, and very attractive. If picked when young, the pods are ten-der and stringless but if left too long become rather hard. Extremely productive. Lb., 40c; 10 lbs., \$3.50; 1 bu., \$18.00.

Davis Kidney Wax Beans. We prepay postage on 1 lb., but larger quantities are quoted f. o. b. Grand Rapids.

This variety recommended by the Michigan State College.

#### WAX PODDED BEANS-Continued

★ Unrivaled Wax Beans Small plant, very early and great yielder. Pods about semi-flat. fleshy and very tender and stringless. Color pale yellow. Lb., 40c; 10 lbs., \$3.50; 1 bu., \$18.00.

Webber Wax A high quality flat-podded stringless variety. Pods 6 to 6½ inches long, quite broad and curved, fleshy and brittle; bright yellow. Lb., 40c; 10 lbs., \$3.50; 1 bu., \$18.00.

#### **Green Podded Varieties**

★ Burpee's Stringless Green Pod A very desirable dwarf, green-podded sort for either home garden or market. Pods 5 to 6 inches long, thick, fleshy, perfectly stringless. Tender and delicious. Lb., 40c; 10 lbs., \$3.50; 1 bu., \$18.00.

Giant Stringless Green Pod Similar to Burpee's Stringless but pods are a little between beans and slightly lighter in color; early, hardy and of highest quality. Lb., 40c; 10 lbs., \$3.50; 1 bu., \$18.00.

Refugee or 1000 to 1 A very productive, hardy, vigorous late sort. Pods 5 to 5½ inches long, somewhat slender, round and slight-ly curved, almost stringless, and of good quality; color light green. Lb., 40c; 10 lbs., \$3.50; 1 bu., \$18.00.

**Bountiful** Best of the flat-podded varieties. Pods 6½ to 7 inches long, thick, flat and slightly curved. Stringless and of fine quality, color light green. Lb., 40c; 10 lbs., \$3.50 1 bu., \$18.00.

Kentucky Wonder or Old Homestead The most popular green-podded, climb-ing Bean; early and productive. Pods 8 to 9 inches long, very slender. Lb., 40c; 10 lbs., \$3.50; 1 bu., \$18.00.

Dutch Case Knife Pole Bean. Green snap pods, 7 to 8 inches long, straight, flat, brittle, of good quality; best as a shell bean. Beans very flat, ivory-white. Lb., 40c; 10 lbs., \$3.50; 1 bu., \$18.00.

#### Lima Beans **Pole Varieties**

King of the Garden Lima An improved strain, vigorous, midseason, productive. Pods 5 to 6 inches long, very flat and wide, and uni-formly four-seeded. Lb., 40c; 10 lbs., \$3.50; 1 bu., \$18.00.

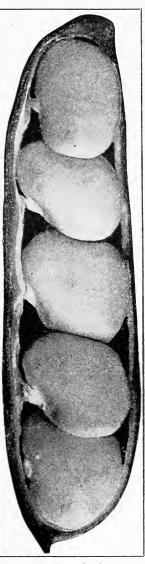
Early Jersey Pole Lima (Sieberts). An early midseason variety. Very pro-ductive and highest quality. Pods 5 to 6 inches long; beans rather thicker than the King of the Garden, but of the same type. Lb., 40c; 10 lbs., \$3.00; 1 bu., \$16.00.



Detroit Dark Red.

Early Leviathan Pole Lima A very ear-ly, large-podded variety. The earliest of the large Lima class. Pods 5 to 6 inches long, containing 5 to 6 large, flat, white beans. Lb., 35c; 10 lbs., \$2.50; l bu, \$14.00. 1 bu., \$14.00.

**Dwarf or Bush Varieties** Burpee's Improved Bush Lima Both beans and pods are larger than the old type.



and pods are larger than the old type. The pods measure 5 to 6 inches long by 1¼ inches wide and are of a lus-cious flavor. They are frequently borne in clusters of from 5 to 8 pods. Lb., 40c; 10 lbs., \$3.50; 1 bu., \$18.00. Fordhook Bush Lima A most excellent variety and exceedingly popu-lar with market gardeners. Pods about 5 inches long, containing 4 to 5 large, oval-shaped, very thick, white beans. Lb., 40c; 10 lbs., \$3.50; 1 bu., \$18.00. Henderson Bush Lima A vigorous, hardy, very early and small type of Gontaining 3 to 4 small, flat, white beans. Lb., 35c; 10 lbs., \$2.50; 1 bu., \$14.00.

1 bu., \$14.00.



Cultural Directions. One ounce to fifty feet of drill. Five or six Cultural Directions. One ounce to fifty feet of drill. Five or six pounds per acre. Do not use stable manure if you want smooth Beets with but few roots. Beets thrive on deep, rich, sandy land. For early crop sow in drills one foot apart, cover seed one inch. Sow as early as the ground can be worked in the Spring. When plants are large enough to use as greens, thin to three inches apart in the row. Beets can be sown as late as July for main crop. Early Wonder An early variety. It is turnip-shaped and is always smooth. The flesh is a beautiful deep red color and is of excellent quality. Tops are small and erect. Exceptionally good for early bunching. Oz., 15c; 1/4 lb., 35c; 1 lb., \$1.25, postpaid.

+ This variety recommended by the Michigan State College.

#### **BEETS**-Continued

Detroit Dark Red The best for the market garden or home use. Roots uniformly smooth, of medium size and globe-shaped, skin dark red, flesh solid vermilion-red. Tops are small, upright, dark green, shaded red. Oz., 15c; <sup>1</sup>/<sub>4</sub> lb., 35c; 1 lb., \$1.25, postpaid.

**Crosby's Egyptian** Where an early market sort is desired, our strain is unequalled. Roots a flattened globe shape, skin very dark red, flesh a trifle lighter, tops small. Oz., 15c; ¼ lb., 35c; 1 lb., \$1.25, postpaid.

**Eclipse** An early variety with small tops and medium sized, round, bright red roots; flesh bright red. Oz., 15c; 1/4 lb., 35c; 1 lb., \$1.25, postpaid.

Early Blood Turnip, Improved The old standard table beet. If flattened, bright red, zoned and of good quality. Not so early as Detroit, but with a larger, coarser top. Oz., 15c; 1/4 lb., 35c; 1 lb., \$1.25, postpaid.

#### **Mangel or Stock Beets**

CULTURAL DIRECTIONS. One ounce to fifty feet of drill, six pounds per acre. Sow early in the spring, in rows about two feet apart; cover seed one and one-half inches deep, pressing the ground firmly over the seed. When plants are three inches high thin to about eight inches apart in the row. The plants pulled may be used for greens.

Mammoth Long Red A favorite with the dairy-man and farmer. Large, well formed; dark red color, very nutritious; a big cropper. Oz., 10c; ¼ lb., 25c; 1 lb., 75c, postpaid.

Golden Tankard Very productive and sweet; tops and neck very small, flesh yellow, especially relished by cows and sheep. Oz., 10c; 1/4 lb., 25c; 1 lb., 75c, postpaid.

#### **Sugar Beets**

Sugar Beets and Mangels are of great value for stock feeding, because of the improved health and condition of the animals, increased flow and quality of milk, and because of the saving in fodder. The yield is enormous, and the cost of growing is trifling. Grow a patch of them for Winter feed. They are also excellent for poultry.

Lane's Imperial Sugar tensively for making beet sugar. Oz., 10c; 1/4 lb., 25c; 1 lb., 75c, postpaid.

Giant Feeding Sugar A most valuable, large yielding variety for feeding; half sugar, oval shaped, skin rose colored, flesh white, very nu-tritious and easily harvested. Oz., 10c; <sup>1</sup>/<sub>4</sub> lb., 25c; 1 lb., 75c, postpaid.





Italian Green Sprouting Broccoli.

#### Broccoli

This variety produces a large head, like cauli-Italian Green Sprouting flower, consisting of a compact cluster of bluish green flower. When the central head is removed, the plant These are cut with 3 or 4 inches of the branch at-tached and tied in bunches for market. The stems as well as the flower heads are cooked and served as cauliflower. <sup>1</sup>/<sub>2</sub> oz., 75c; 1 oz., \$1.25; <sup>1</sup>/<sub>4</sub> lb., \$4.00, postpaid.

# Cabbage

CULTURAL DIRECTIONS. One ounce will pro-duce about 2,000 plants; 10,890 plants will plant an acre of early cabbage; and 7,260 plants for an acre of late. Eight ounces of seed will plant an acre of early and four ounces an acre of late cabbage. For early cabbage, sow seed in hotbeds in January or February. Transplant as early as passible to the open ground Transplant as early as possible to the open ground about two feet apart each way. For late cabbage, sow seed in the open ground in May and transplant about July first in rows 2½ feet each way.

★ Golden Acre A new, round-headed, early cabbage. Heads round, very hard. As early as the Jersey Wakefield. Some claim it to be a week as the Jersey wakefield. Some claim it to be a week earlier. This variety matures two or three weeks earlier than the Copenhagen Market, but is other-wise quite similar. Owing to the earliness and re-markable uniformity, Golden Acre will prove to be the most profitable early cabbage for the market gardeners. Oz., 60; ¼ lb., \$2.00; lb., \$7.00, postpaid. Early Jersey Wakefield Market gardeners in general consider this the best early variety. Conjical in shows the heads are vary uniform

variety. Conical in shape, the heads are very uniform in shape and very solid. Our stock is dwarf, compact and extremely early. Oz., 25c; 1/4 lb., 90c; lb., \$3.00, postpaid.

postpaid. Earliest of All A new Danish introduction of the Copenhagen type, heads are perfectly round, solid and of uniform size. Fully 7 to 12 days earlier than Jersey Wakefield. Average about 4 lbs. each. Oz., 25c; <sup>1</sup>/<sub>4</sub> lb., 90c: 1 lb., \$3.00, postpaid. Copenhagen Market Wakefield. Stems short, heads heads out of solid with faw outer leaves. Oz., 30c;

large, round and solid, with few outer leaves. Oz., 30c;

large, round and solid, with few outer leaves. Uz., ouc, ¼ Ib., \$1.00; 1 lb., \$3.00, postpaid.
All Seasons be planted for early or late crop. Good keeper. Oz., 20c; ¼ lb., 60c; 1 lb., \$2.00, postpaid.
Surehead All sure to head. Late cabbage of the Flat Dutch type; a splendid keeper. Oz., 20c; ¼ lb., 50c; 1 lb., \$2.25, postpaid.
★ Danish Ballhead Short stemmed, heads round, very solid and heavy. Solendid keeper, bardy and the best Winter sort. Oz., 25c; ¼ lb., 90c; hardy, and the best Winter sort. Oz., 25c; 1/4 lb., 90c; 1 lb., \$3.00, postpaid.

#### CABBAGE-Continued

Premium Flat Dutch Second early variety, highly very solid, broad, round, flattened on top, fine grained and tender. Oz., 25c; ¼ lb., 90c; 1 lb., \$3.00, postpaid.

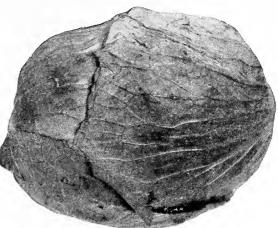


Glory of Enkhuizen Excellent, medium early, short stemmed, heads large, round and very solid. A long keeping variety. Oz., 25c; 1/4 lb., 90c; lb., \$3.00, postpaid.

#### Henderson's Early Summer

Heads medium in size, round, somewhat flat, compact and solid. Ten days later than Jersey Wakefield and one of the best second early sorts. Oz., 25c; 1/4 lb., 90c; lb., \$3.00, postpaid.

Drumhead Savoy Very large, solid heads. Dark green, superior quality. Oz., 20c; <sup>1</sup>/<sub>4</sub> lb., 60c; 1 lb., \$2.00, post-paid.



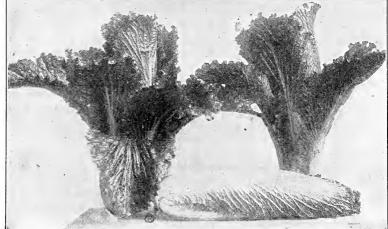
Premium Late Flat Dutch,

American SavoyLarge, flattish heads, very curly and hard. One of the best Savoys. Oz.<br/>20c; ¼ lb., 75c; 1 lb., \$2.50, postpaid.Mammoth Rock RedHeads solid, of good size and quality.<br/>\$3.00, postpaid.Oz., 25c; ¼ lb., 90c; 1 lb.,<br/>\$3.00, postpaid.Red Stone HeadA new Danish introduction and exceptionally good, forming big uni-<br/>formly round heads, smooth, hard, of a glowing dark red color. A good<br/>keeper that will last long into the Winter, when fully matured.<br/>Oz., 25c; ¼ lb., 90c; 1 lb.,<br/>\$3.00 \$3.00, postpaid.



#### **Brussels Sprouts**

The culture is the same as for cabbage which it resembles. The eable part being the small heads, an inch or two in di-ameter that form at each leaf joint all the way up the stalk. The leaves should be broken off in the fall to give more room for the little heads to grow. Delicious and more tender than any cabbage. Half dwarf. Oz., 25c; ¼ lb., 90c; 1 lb., \$3.00, postpaid.



#### Chihili Chinese Cabbage.

#### **Celery Cabbage**

CULTURAL DIRECTIONS. One ounce will produce 2,000 plants. Do not sow seed till the last of May, as earlier sowing generally results in most of the plants going to seed instead of making heads. Seed may be sown in seed beds and transplanted in rows three feet apart and about fifteen inches apart in the row, or may be sown in rows and thinned. For late crop may be sown as late as August tenth. Late crop is generally trenched with boards. Make trench about six feet wide, pull the head, cutting off roots and placed side by side and trench. Bank outside the boards with dirt and protect the tops with straw, putting boards over tops. Remove as wanted during early winter months.

early winter months.

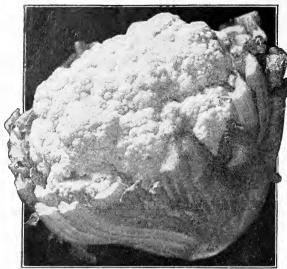
**Chihili** This new vegetable is becoming more popular every year and is a money-maker for the market gardener. It has a delicate cabbage flavor, much milder than cabbage. The heads are long, about 16 inches, rather slim, coming to a point at the top. Color a very dark bluish green, with the inner leaves and stalks blanched to a beautiful snow white. Oz., 40c; 14 lb., \$1.25; 1 lb., \$4.50, postpaid.

#### Swiss Chard

CULTURAL DIRECTIONS. One ounce to fifty feet of drill; five pounds per acre. Sow early in the spring, in rows eighteen inches apart and thin to one foot apart. The plants are of very rank growth, and will continue to grow and produce all Summer and if given a little protection during the Winter, will produce early greens in the Spring. Lucullus Leaves large and curly. Plant grows about two feet high, mid-ribs are very broad and are a good substitute for asparagus dur-ing the Summer months. Oz., 10c; ¼ lb., 25c; 1 lb., 75c, postpaid.

7

Swiss Chard, Lucullus,



Danish Perfection Cauliflower.

### Carrots

CULTURAL DIRECTIONS. One ounce to 100 feet of drill; two pounds per acre. For early crop, sow in Apill or May, and June to July for late. Sow seed half an inch deep in rows 12 inches apart and thin to three inches apart in the row. Plant in rich, sandy loam.

Feonia Coreless The most handsome and appetizing ap-pearing Carrot we are acquainted with and of the highest quality. The roots average 6 inches in length by 1½ inches in diameter, nearly cylindrical, exceptionally smooth and of a distinct deep orange color. The flesh is crisp and sweet and practically coreless; tops are very small. Oz., 15c; 1/4 lb., 50c; 1 lb., \$1.50, postpaid.

★ Chantenay A medium early, half-long variety for the early market. Roots five or six inches long, smooth and tapering; orange-red in color. Used largely for bunching. Oz., 10c; ¼ Ib., 30c; 1 Ib., \$1.00, postpaid.

★ Danvers Half Long The best main crop sort. Roots ductive. Oz., 10c: ¼ lb., 30c; 1 lb., \$1.00, postpaid. French Short Horn Very early bunching Carrot; best for forcing. Roots orange-red in color,

about three inches long, tender and sweet. Oz., 10c; 1/4 lb., 35c; 1 lb., \$1.25, postpaid.



Chantenay Carrots.

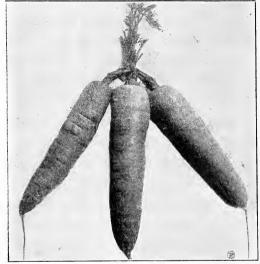
## Cauliflower

CULTURAL DIRECTIONS. One ounce of seed will produce 2000 plants. Four ounces of seed to an acre. Directions about the same as Cabbage, except planting in rows about 3 feet apart and 18 inches apart in the row. When plants begin to head, the leaves up around the heads to protect from the sun.

Select Snowball A very fine strain of this variety grown from selected heads. Oz., \$2.00; 14 lb., \$6.00; 1 lb., \$20.00, postpaid.

<sup>14</sup> Ib., \$6.00; 1 Ib., \$20.00, postpaid.
 Danish Perfection The self-protecting cauliflower, so called on account of the spiral-shaped manner in which the leaves grow around the stem, thereby protecting the head with little, if any, tying. A cross between Early Erfurt and Danish Dry Weather. Heads snow-white, very compact and solid.
 Oz., \$2.00; <sup>14</sup> Ib., \$6.00; Ib., \$20.00, postpaid.
 Danish Dry Weather This is an excellent large, pure white variety that matures later than the Select Snowball, but is better suited for dry localities. Oz., \$2.50; <sup>14</sup> Ib., \$8.00; 1 Ib., \$30.00, postpaid.

Extra Early Dwarf Erfurt An excellent sort, producing good sized creamy white heads. One of the best for general cultivation. Oz., \$2.00; <sup>1</sup>/<sub>4</sub> lb., \$6.09; lb., \$20.00, postpaid.



Feonia Coreless Carrots.

Oxheart or Guerande Very short, thick and stubby. Very desirable for heavy clay soil, as it is easily harvested. Oz., 10c; ¼ lb., 30c; 1 lb., \$1.00, postpaid.

White Belgian Large white stock Carrot. Oz., 10c; 1/4 lb., 20c; 1 lb., 80c, postpaid.

Yellow Belgian Grows one-third out of the ground. Very large, long yellow stock Carrot. Oz., 10c; <sup>1</sup>/<sub>4</sub> lb., 20c; 1 lb., 80c, postpaid. Scarlet Horn A small, early, stump-rooted variety of good flavor and quite nerver the roots will average about 3 inches long. Oz., 10c; <sup>1</sup>/<sub>4</sub> lb., 30c; 1 lb., \$1.00, postpaid.

Nantes A very superior Carrot. It is coreless, brittle, fine grained and of fine, mild, sweet flavor. The color is reddish orange and the skin is smooth. It is 6 inches long, cylindrical and very stump-rooted. Oz., 10c; 1/4 lb., 30c; 1 lb., \$1.00, postpaid.

**Cress or Pepper Grass** CULTURAL DIRECTIONS. Sow early in the Spring in rich, well prepared soil, in rows about fifteen inches apart. Thin to four inches apart in the row. **Extra Curled** (Pepper Grass). A small, curled plant having a fine pungent flavor and used as a salad. Should be sown thickly and fre-quently, covering very lightly as it soon runs to seed. May be cut several times. Oz., 10c; ½ lb., 25c; 1 lb., 75c, postpaid.

True Water For growing along banks of ponds and streams as well as in shady places where there is a supply of fresh water. It increases both by the spreading of the roots and seeding. Leaves are quite large and thick. Oz., 50c, 1/4 lb., \$1.75, postpaid.

★This variety recommended by the Michigan State College.

#### Celerv

CULTURAL DIRECTIONS. One ounce will produce from 5,000 to 10,000 plants. Two ounces per acre. Muck soil is best for Celery, but good Celery may be grown on rich, loamy soil if water can be applied freely. Celery needs manure and fertilizer. For early crop sow seed in hotbeds or greenhouse in March. Make seed bed very fine, sow seed broad-cast and pack soil. Transplant in June in rows three or four feet apart. Early Celery is bleached with boards or paper. For late crop sow seed in April or May in open seed beds and transplant in July. Bank with muck or dirt and trench in the field in October.

The New Golden Self Blanching This new type is grown in FRANCE. It has a long stalk and is commonly called "TALL STRAIN." A vigorous and rapid grower, and not so badly affected by blight or disease. It can be grown on muck, which will not grow the old Golden Self Blanching, either on account of exhausted condition of the soil or the soil being too badly infected with disease spores. It makes a magnificent growth of tall disease spores. It makes a magnificent growth of tall, broad, flat stalks of a lighter shade of yellow. If seed is sown later in the open ground and transplanted in July or August, so that plant is not over ripe when trenched, it will come out crisp and hard up to the first of January. This strain is the leading variety grown today. Oz., \$1.35; ¼ lb., \$5.00; ½ lb., \$9.00; 1 b \$18 d0 noctored Ib., \$18.00, postpaid.

New Golden Self Blanching Imperial strain. This strain is American grown and for the past two years has been grown in our trials with entire satisfaction. It is very similar to the "Tall Strain French Grown" (listed above) from which it was taken and is a valuable addition and should become a favorite with the celery grower. Oz., \$1.35; 1/4 lb., \$5.00; 1/2 lb., \$9.00; 1 lb., \$18.00, postpaid.

Easy Blanching Our strain of this valuable variety is superior to most strains from the fact that it bleaches evenly, leaving no green, un-bleached stalks. Does not become soft after bleach-ing, but remains firm, brittle and sweet. The stalks are very thick and quite tall. It is about two weeks later than the Golden Self Blanching, and may be used either for early or late celery. When grown for late Celery, the seed should be sown later and trans-planted from the middle to the last of July and when planted from the middle to the last of July, and when trenched with dirt will keep till January and come out of the trenches firm and brittle. It has no su-perior as to eating quality or flavor. It is almost immune to blight and no crop has ever been lost from disease. Due to bad weather conditions the crop this year is an entire failure and new seed is not available, however the seed we offer this year is low on germination as well as vitality but sufficient extra seed will be furnished on all orders to give an average ger-mination and stand. Oz., 75c; 1/4 lb., \$2.50; 1 lb., \$10.00, postpaid.

Paris Select, Grower's Golden A distinct new variety, embracing the quick growing and keeping qualities of the French New Golden Self Blanching. It grows a big stalk, but shorter, which is much preferred. It is very uniform in height guarding the preferred to the state of the state. in height, superior quality, blanching quickly to a creamy yellow color. Where the trenching is done with earth, it has no equal, but for early celery, where the trenching is done with boards or paper, it is not recommended. Oz., \$1.25; ¼ lb., \$4.50; 1 lb., \$16.00, recentil postpaid.

**Golden Plume** The grandest new variety introduced in many years. It seems to be an in-termediate between the Golden Self Blanching and Easy Blanching. While it is a yellow celery, it is a lighter shade of yellow than the Golden Self Blanch-ing. Plant is a more view of the self Blanching. Plant is a more vigorous grower, nearly as early, stalks are thicker, and not quite so flat as our New Golden Self Blanching which it resembles. Blanches easily and does not become soft after bleaching. Seed is very pure, no green stalks or off types appearing and no hollow stalks. Plants very large and will turn out more boxes to the acre than any variety grown. Oz., \$1.50; <sup>1</sup>/<sub>4</sub> lb., \$5.50; lb., \$20.00, postpaid. Newark Market A superior strain of green celery. The stalks are large, thick and fleshy, very brittle, crisp and of a fine flavor. Blanches easily. Oz., \$1.35; ½ lb., \$5.00; lb., \$18.00, postpaid.

Pride of the Market A dwarf thick-stalked variety, vigorous grower, not easily blighted, and yields about as many boxes per acre as the White Solid, but not so good a keeper, and should be marketed after the Golden Self Blanching and be-fore the White Solid. Our seed is grown by the orig-inator. Oz., \$1.50; ¼ lb., \$5.50; 1 lb., \$20.00, postpaid.

Grower's Wonderful Celery A distinct and valuable early variety. The plants are semi-dwarf, very vigorous, and are not so susceptible to blight and other Celery diseases. It has a very full heart which bleaches quickly to a beautiful golden vellow color. Its quality is sur-passed by none, and its handsome appearance commands a ready sale in any market. An excellent sort for both home or market garden. It is all the name implies. Oz., \$1.50; ¼ lb., \$5.50; 1 lb., \$20.00, postnaid

Winter Queen Of very stocky dwarf growth and one of the best for its winter keeping quali-ties. Our strain has a large heart and presents a handsome appearance when bunched. Oz., 25c; 1/4 lb., 75c; lb., \$2.50, postpaid.

French Success A late maturing green celery, but the best of all for keeping qualities. Oz., 35c; ¼ lb., \$1.00; lb., \$3.50, postpaid.

Fordhook Emperor Quite dwarf and stocky with large, full light yellow heart. Stalks broad, thick and crisp. Very tender and brittle. Oz., 40c; ¼ lb., \$1.25; lb., \$4.50, postpaid.

Golden Self-Blanching Old style, American grown seed. Oz., 75c; 1/4 lb., \$2.50; 1 lb., \$8.00, postpaid.

White Plume, Improved A very early, handsome va-riety, leaves light, bright green; easily blanched a beautiful silvery-white color. A popular sort for first early market. Oz., 30c; 1/4 lb., \$1.00; 1 lb., \$3.50, postpaid.

Columbia Very brittle and crisp, sweet and nutty. So tender it is hard to pack for shipping. Oz., 25c; 1/1 lb., 75c; 1 lb., \$2.50, postpaid.

Soup or Cutting The leaves are used for flavoring soups, etc. Oz., 20c; 1/4 lb., 60c; 1 lb., \$2.00, postpaid.

Celeriac or Turnip-Rooted Celery Oz., 25c; 1/4 lb., \$2.00, postpaid.

#### **Corn Salad**

CULTURAL DIRECTIONS. One ounce for 100 feet of drill. Sow in August or September for Fall or Spring use. Drill about one inch deep in rows twelve inches apart. Thin and keep free from weeds. Pro-tect in Winter by light covering of straw. Use as a salad.

Oz., 10c; <sup>1</sup>/<sub>4</sub> lb., 30c; 1 lb., \$1.00, post-paid. Large Seeded

### Collards

True Georgia Plant two to three feet high, forming a cluster of tender, undulated leaves at the top of its rather long stem; used as greens. Oz., 10c; <sup>1</sup>/<sub>4</sub> lb., 30c; 1 lb., \$1.00, postpaid.

# \*Michigan State College Disease-Resistant Strains of Celery

Choose the Variety to Fit Your Market

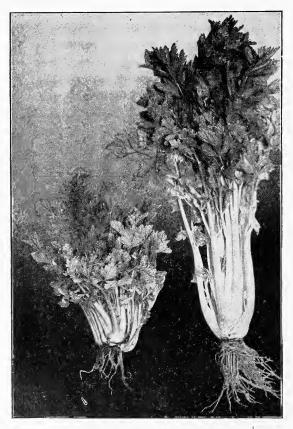
For nearby markets where a soft, quick blanching variety is wanted—Wonderful or Golden Plume.

For long shipment or blanching in storage, (a) if the soil is not infested with "Yellows"—Golden Self Blanching; (b) if soil is infested with "Yellows"—M. S. C. strain, yellows-resistant Golden Self Blanching. For markets wanting a green celery blanched in boards or light dirt covering, (a) Standard type— Easy Blanching; (b) Fancy, ruffled leaf type—Curly Leaf Easy Blanching (M. S. C.) strain.

For Winter markets, Celery to be dirt blanched— Pascal or other Winter Celeries.

#### ★Michigan State College Strain Golden Self Blanching Celery YELLOWS RESISTANT Recommended for Soil Infested with Yellows

This strain of Golden Self-Blanching Celery has been produced at the Michigan State College as a result of several years investigation and test by the pathologists of the Department of Botany. The M. S. C. Strain is of the type of the old-fashioned yellow celery so extensively produced a few years



M. S. C. Strain Golden Self-Blanching Celery grown in soil infested with "Yellows" at South Denver, Colorado, contrasted with a commercial strain grown in the same field. One crop was stunted by "Yellows" and was largely unmarketable, the other produced stalks of uniformly high quality.

ago and now almost superseded by the green varieties that are resistant to Yellows. This new selection is practically a pure line of Golden Self-Blanching with resistance to soil sickness or Yellows as an added quality.

This variety bleaches in ten days to two weeks, ships well, keeps well in storage and the beautiful golden-yellow color in the leaves and the creamy white color of the stalks is unsurpassed by any other variety. It is not a quick blanching celery with soft stalks like some of the newer yellow sorts. The M. S. C. strain is resistant only to the Yellows disease and must be sprayed to protect it against the blights that affect the foliage and stalks.

The seed offered for sale has been produced in co-operation with the U. S. Department of Agriculture in California. Seed for increase is furnished by the Department of Botany from their own selections and sent to California for increase by government experts.

The following new prices are announced for 1930: ½ oz., \$1.00; 1 oz., \$1.50; ¼ lb., \$5.50; 1 lb., \$20.00.

#### ★Curly Leaf Easy Blanching M. S. C. Strain

This is a new selection from Easy Blanching celery possessing all of the qualities of that well known strain, and in addition presenting an exceptionally handsome appearance due to its curled and ruffled leaves. This seed is a pedigreed strain produced in California by the U.S. Department of Agriculture from seed furnished by the Department of Botany, Michigan State College. This seed is especially recommended for use on diseased soil where Golden Self Blanching celery does poorly and where a green celery is suitable to market demands. This strain blanches readily in cold storage and excels any other green variety in this respect. It can readily be recognized even in the seedling stage and when this seed comes into general use, substitutions of other varieties can readily be detected. Price, 1/2 oz., \$1.00; 1 oz., \$1.50; ¼ lb., \$5.50; 1 lb., \$20.00.

This variety recommended by the Michigan State College.

# **Sweet Corn**

CULTURAL DIRECTIONS. One pint for 100 hills; about six quarts per acre. Early corn is planted in rows 2½ to 3 feet apart, and about 8 inches apart in the row, in May, and will be ready for table eight or nine weeks from date of planting. Later varieties should be planted from the 15th of May to the 15th of June. Plant in hills three to four four apart and it will be ready for the four four the 15th of June. three to four feet apart, and it will be ready for use in from ten to twelve weeks from date of planting.

Experiment Station, from a cross between the Golden Bantam and Gill's Early Market and combines the earliness and large size of ear, of the Gill's Early Market with much of the high quality of the Golden Bantam. It is ready for market a week to ten days earlier than Golden Bantam, and has a much larger ear, the ears averaging 8½ inches long, with 12 to 14 rows. Everyone who has tested this Corn has much praise for its quality and extreme earliness. Especially valuable to the market grower. .Lb., 35c; 10 lbs., \$2.70; 25 lbs., \$6.50; 100 lbs., \$25.00. ★Early Surprise eared and white cobbed Corn of very good quality. Ears 7 to 7½ inches long, growing on stalks about five feet tall. Planted at the same time, it is a week to 10 days earlier than Early White Cory. If you want to have the first Sweet Corn on the market, be sure to plant Early Surprise. Lb., 25c; 10 lbs., \$2.20.

Corn on the market, be sure to plant Early Surprise. Lo., 25c; 10 10s., \$2.25;
25 lbs., \$5.25; 100 lbs., \$20.00.
Bantam Evergreen This new variety combines all the good qualities of Golden Bantan and Stowell's Evergreen. Has the bright golden color and tender kernels of Golden Bantam and the flavor and sweetness of Stowell's Evergreen, but much larger than Bantam; not quite as large as Evergreen, but much earlier. Stalks are full leaved and usually bear two well-developed ears. Lb., 25c; 10 lbs., \$2.00; 25 lbs., \$5.25; 100 lbs., \$2000.
Early White Cob Cory Ears 7 to 8 inches long, fairly sweet, tender and white. Lb., 25c; 10 lbs., \$2.00; 25 lbs., \$4.75; 100 lbs., \$18.00.
Stowell's Evergreen than any other sort, being the general favorite with the market gardeners. Ears are of good size, grain deep, tender and sugary. Lb., 25c; 10 lbs., \$1.80; 25 lbs., \$4.75; 100 lbs., \$18.00.
Early Evergreen Has all the merits of the "Stowell's" and matures about 10 days \$1.80; 25 lbs., \$4.75; 100 lbs., \$18.00.
★ Golden Bantam A hardy, early maturing variety of very dwarf growth. The cob is which turn to yellow when entirely "ripe. No home garden should be without a plot of this excellent Corn. Lb., 25c; 10 lbs., \$2.25; 25 lbs., \$5.25; 100 lbs., \$20.00.
★ Condern Samal but fills out nicely with large, deep cream colored kernels, whene garden should be without a plot of this excellent Corn. Lb., 25c; 10 lbs., \$2.00; 25 lbs., \$2.00.
★ Golden Bantam A hardy, early maturing variety of very dwarf growth. The cob is which turn to yellow when entirely "ripe. No home garden should be without a plot of this excellent Corn. Lb., 25c; 10 lbs., \$2.25; 25 lbs., \$5.25; 100 lbs., \$20.00.
★ Conduct Gentleman the 25c; 10 lbs., \$2.25; 25 lbs., \$5.25; 100 lbs., \$2.00.

lbs., \$2.00; 25 lbs., \$4.75; 100 lbs., \$18.00.

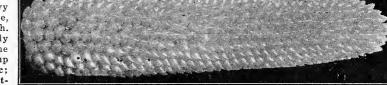
**Pop Corn** Selected White Rice A very handsome

and prolific white Pop Corn. Ears are 5 to 7 inches long. The kernels are long, pointed and somewhat resemble rice. Productive, excellent quality, crisp and delicious. 1 lb., 30c, postpaid; 5 lbs., \$1.25, not postpaid.

#### 🛨 Golden Bantam Sweet Corn.

Japanese Hulless A dwarf growing variety, heavy yielder of attractive ears, peculiar form, being nearly as thick as long. The kernels are larger than white rice, color pearly white. Entirely hulless, which makes them the tenderest of any Pop Corn, when popped. 1 lb., 30c, postpaid; 5 lbs., \$1.25, not postpaid.

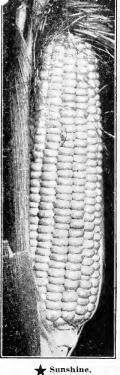
This variety Black Beauty ripens earlier than any other sort, heavy yielder. Ears are medium size, kernels rounded and smooth. Pops large and is decidedly tender and crisp. While the kernels are black, they show up white when popped. 1 lb., 30c; postpaid; 5 lbs., \$1.25 not postpaid.



Selected White Rice Pop Corn. We prepay postage on one pound, but larger quantities are quoted f. o. b. Grand Rapids.

+This variety recommended by the Michigan State College.

Country Gentleman Lb., 25c; 10 lbs., \$2.23, 23 lbs., \$3.25, 10 lbs., \$2.00. Country Gentleman Lb., 25c; 10 lbs., \$2.00; 25 lbs., \$4.75; 100 lbs., \$18.00. Early Minnesota Lb., 25c; 10 lbs., \$2.00; 25 lbs., \$4.75; 100 lbs., \$18.00. Black Mexican loss, \$100, Very early. Kernels turn bluish black when ripe. Lb, 25c; 10 lbs., \$2.00; 25 lbs., \$4.75; 100 lbs., \$18.00. Very early. Kernels turn bluish black when ripe. Lb., 25c; 10 lbs., \$2.00; 25 lbs., \$4.75; 100 lbs., \$100, Very early. Kernels turn bluish black mexican loss turn bluish black when ripe. Lb, 25c; 10 lbs., \$2.00; 25 lbs., \$4.75; 100 lbs., \$18.00. Very early. Kernels turn bluish black when ripe. Lb, 25c; 10 lbs., \$2.00; 25 lbs., \$4.75; 100 lbs., \$100, Very early. Kernels turn bluish black when ripe. Lb, 25c; 10 lbs., \$2.00; 25 lbs., \$4.75; 100 lbs., \$100, Very early. Kernels turn bluish black when ripe. Lb, 25c; 10 lbs., \$2.00; 25 lbs., \$4.75; 100 lbs., \$2.00; 25 lbs., \$4.75; 100 lbs., \$2.00; 25 lbs., \$4.75; 100 lbs., \$100, Very early. Kernels turn bluish black when ripe. Lb, 25c; 10 lbs., \$2.00; 25 lbs., \$4.75; 100 lbs., \$4.75; 100 lbs., \$2.00; 25 lbs., \$4.75; 100 lbs.



# **Table and Pickling Cucumbers**

CULTURAL DIRECTIONS. One ounce of seed to fifty hills. One to two pounds per acre. Cucumbers should not be planted until the ground is warm, about June first. For pickles, they may be planted as late as July first. They require a warm, rich, sandy soil. Plant in hills about four feet apart and about eight seeds to the hill. When all danger from insects is past, thin to three or four of the strongest plants.

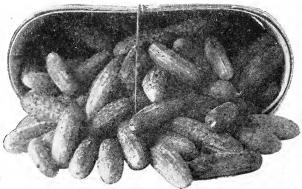
Grand Rapids Forcing, Improved Strain By years of constant, tion, we can now offer the "Improved Strain." This is a White tion, we can now offer the "Improved Strain." This is a White Spine selection and is an excellent long, slender, dark green variety. The vines are exceptionally healthy and productive. The fruits will average 12 to 14 inches in length by 2½ inches in diameter, and are very symmetrical. The color is all that could be desired. It is an ideal forcing Cucumber and will breed true to type. Oz., \$1.50; ¼ lb., \$5.00; 1 lb., \$15.00, post-reid paid.

Chicago Pickling, or Westerfield's The fruit is of medium size, pointed at both ends, and makes a firm pickle. Oz., 15c; 1/4 lb., 35c; lb., \$1.25, postpaid.

Longfellow Cucumber An excellent long, slender, dark green variety, equally desirable for greenhouse forcing or outdoor culture. An ideal type for the private garden or as a straight pack variety for shipment to market. 12 to 14 inches long by 2½ inches in diameter. Fairly early, a good healthy grower, very productive. Oz., 35c; ¼ lb., \$1.15; 1 lb., \$4.00, postpaid.

White Spine (Improved). A very fine, early strain. Fruit very rich, dark green, symmetrical, thick and nearly square ended, vigorous and pro-ductive. Oz., 15c; 1/4 lb., 40c; lb., \$1.25, postpaid.

Arlington White Spine One of the earliest and very productive. Fruit uniform, of bright green color. Used for early slicing. Oz., 15c; 1/4 lb., 40c; lb., \$1.25, postpaid.



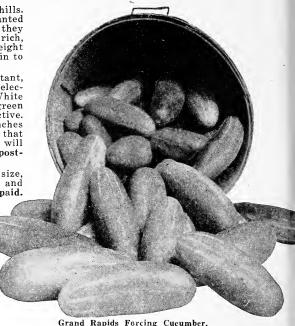
Chicago Pickling Cucumber.

### Kale or Borecole

CULTURAL DIRECTIONS. One ounce to 150 feet of drill. Sow from August 15th to October in rows, eighteen inches apart, and they will yield greens dur-ing Fall and Winter. They are improved by freezing.

Dwarf Curled Scotch A handsome, very finely curled, dwarf spreading variety, foliage long and an attractive bright green, very hardy. Oz., 15c; 1/4 lb., 40c; 1 lb., \$1.50, postpaid.

Tall Curled Scotch Plants of this variety grow 2 to 3 feet in height, bearing long plume-like light green leaves which are much cut and deeply curled at the edges. Very hardy. Oz., 15c; 1/4 lb., 40c; 1 lb., \$1.50, postpaid.



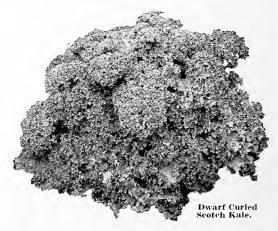
Grand Rapids Forcing Cucumber.

Early Fortune One of the most productive sorts now grown. Fruit symmetrical, about nine inches in length, round and beautiful dark green in color, which does not fade. Flesh very brittle and crisp, with small seed cavity. Oz., 15c; 1/4 lb., 40c; lb., \$1.50, postpaid.

Improved Long Green A standard late, well known table sort. 12 to 14 inches long, slender, more or less warted, tapering towards the stem end, color dark green, flesh white and firm. Oz., 15c; ½ lb., 40c; 1 lb., \$1.50, postpaid.

Nichols' Medium Green Color dark green, flesh crisp and tender, medium size, straight and smooth. Very productive. Oz., 15c; ¼ Ib., 40c; Ib., \$1.25, postpaid.

Davis' Perfect One of the products of our Eugene Davis, produced by crossing the White Spine variety with a long English forcing Cucumber. The Davis' Perfect is one of the most prolific sorts. The fruit is long, slim, and holds color till nearly ripe. Oz., 15c; ¼ lb., 40c; 1 lb., \$1.50, postpaid.





CULTURAL DIRECTIONS. One ounce to 1,000 plants. Seed germinates very slowly and requires warm ground. Start in hotbeds in March. Transplant about June 1st in rows about three feet apart and two feet apart in the row.

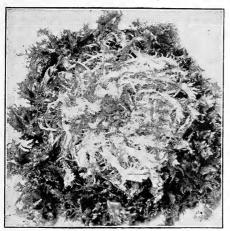
Black Beauty Early and productive. Fruit large and of a rich glossy black color. Postpaid, oz., 40c; 1/4 lb., \$1.40; 1 lb., \$5.00.

New York Purple A favorite market variety. Fruits larger than the Black Beauty. The plant is large. spreading and spineless, producing 4 to 6 large oval fruits of dark purple color. Oz., 40c; ¼ lb., \$1.40; 1 lb., \$5.00, postpaid.



CULTURAL DIRECTIONS. One ounce to 150 feet of drill. Sow in rows about fifteen inches apart and thin to one foot apart in the row. Sow seed for Fall crop in June or July. When nearly full grown tie outer leaves together bringing them up over the head for blanching.

Long Green Curled The most hardy and vigorous sort, has very curly leaves, the mid-rib being white. After blanching, the



Large Green Curled Endive.

American Flag Stem about ten inches long by two inches thick. A strong vigorous plant with mild flavor. One of the best sorts for the market garden. Postpaid, oz., 20c; 1/4

White Vienna Kohl-rabi.

leaves make a delicious and a p p e t i z i n g salad. Oz., 10c;  $\frac{1}{4}$  lb., 30c; 1 lb., \$1.00, postpaid.

Moss Curled Grows more compact than the green curled and the medium green leaves are finer cut, blanches creamy white. Oz., 10c; 1/4 lb., 30c; 1 lb., \$1.03, postpaid.

Black Beauty Eggplant.

Broad-Leaved Batavian (Escarolle). One of the best varieties broad, more or less twisted and waved, bright deep green, with a nearly white midrib. Inner leaves form a fair head which blanches a creamy white. Oz., 10c; ½ lb., 30c; 1 lb., \$1.00, postnaid.

# Leek

CULTURAL DIRECTIONS. One ounce to 100 feet of drill. Two of three pounds per acre. Sow in May in rows fifteen to eighteen inches apart and thin to six or eight inches apart; generally sown in trenches and covered with half an inch of soil, or they may be sown in seed beds and transplanted. When grown for the market they are left in the field all Winter and pulled early in the Spring.

lb., 60c; 1 lb., \$2.00.

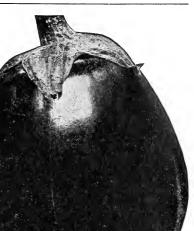
#### Kohl-rabi Turn p-Rooted Cabbage

CULTURAL DIRECTIONS. One ounce to 200 feet of drill. Seed should be sown in light, rich soil, very early in the Spring for early crop, in rows eighteen inches apart and thin to six inches apart in the row. Plantings should be made the latter part of July for Fall use. Should be used when young and tender.

Early White Vienna Very early, small tops, can be planted close together; best for forcing, or field culture. Postpaid, oz., 20c; 1/4 lb., 60c; 1 lb., \$2.00.



American Flag Leek.



## Leaf Lettuce

CULTURAL DIRECTIONS. One ounce to 150 feet of drill. Lettuce requires rich soil to grow best quality. Mix Pulverized Hen Manure well with the soil and sow seed very early in the Spring. For leaf lettuce, sow in rows twelve inches apart and do not thin until plants are big enough to use. Head lettuce should be sown in rows twelve inches apart and thinned to eight inches apart in the row.

#### \*Grand Rapids Forcing, Washington Strain

This splendid strain was first produced by plant selection by the honored W. W. Tracy of the Agricultural Department at Washington. Mr. Yonker procured some from Eugene Davis, sent him by Mr. Tracy. Mr. Yonker, by careful plant selection, has kept it up to its original purity. It is absolutely true to type and is more like the original Grand Rapids Forcing as it came from the hands of Eugene Davis. Mr. Yonker is well qualified to continue the breeding of this variety and can be depended upon to keep it up to its present high standard. There are very few if any sports. Color a light green; heads very heavy; leaf crisp, tender and curly; quality of the best. We grow our stock seed in the greenhouse and send to one of the best Lettuce seed growers on the Coast to grow the seed crop. Oz., 25c; 1/4 lb., 75c; 1 lb., \$2.50, postpaid.

Grand Rapids Forcing, Ohio Strain good strain of the old type of forcing variety and is especially adapted to mid-winter crop in the greenhouse. The leaf is dark green, of rapid upright growth, and curly. The quality is very desirable and will retain its freshness a long time after being cut. A great favorite in the Ashtabula and Cleveland lettuce markets. Oz., 10c; ¼ lb., 40c; 1 lb., \$1.50, postpaid.

Early Curled Simpson of the best sorts for the home garden. Oz., 15c; 1/4 lb., 35c; 1 lb., \$1.25, postpaid.

★Black-Seeded Simpson den or for the market garden, for outdoor sowing. Can be grown all through the season. Very tender. Oz., 15c; ¼ lb., 35c; 1 lb., \$1.25, postpaid.

Prizehead A crisp and tender loose-leaved non-heading sort, color light brown on a medium green base, quality good. Oz., 15c; ¼ lb., 40c; 1 lb., \$1.50, postpaid.

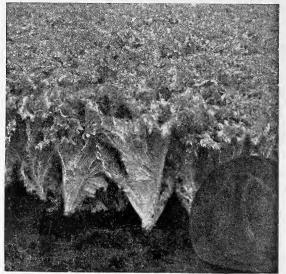
#### **Head Lettuce**

★Big Boston Our Big Boston Lettuce seed is grown for us by one of the most careful firms of seed growers in the world. It heads best in cool weather of early Spring and late Fall. We do not recommend it for the hot Summer months. Oz., 15c; ¼ lb., 40c: 1 lb., \$1.50, postpaid.

Unrivaled or Green Leaved Big Boston French grown. Unrivaled heads better in hot weather than Big Boston, which it resembles, but does not have the red tinge. The heads are firm and of high quality. Oz., 20c; 1/4 lb., 60c; 1 lb., \$2.00, postpaid.

★Salamander A large, firm head, leaves light green, broad, thick, somewhat crumpled, closely overlapping so that they blanch to a creamy white. Oz., 15c; ¼ lb., 40c; 1 lb., \$1.50, postpaid.

All Seasons Heads very large, grayish green, leaves rather thick but blanch to a beautiful golden yellow. This variety wants hot weather to head well and is not satisfactory for early Spring crop. Oz., 15c; ¼ lb., 35c; 1 lb., \$1.35, postpaid.



Washington Strain of Grand Rapids Forcing Lettuce.

New York or Wonderful A large, late globular headthick texture, fairly blistered and crumpled, and the borders frilled; color, dark green, quality good. Known in California and the West as "Los Angeles" and shipped to eastern markets under the misleading name of "Iceberg". Oz., 20c; ¼ Ib., 60c; 1 Ib., \$2.00, postpaid.

May King A handsome, small, extremely early, compact leading variety, leaves light yellowish green, tinged reddish brown at the edges, while the heart blanches a rich golden yellow, fine quality. Oz., 15c; ¼ lb., 40c; 1 lb., \$1.50, postpaid.

Iceberg A large, crisp lettuce, very tender, stands hot weather better than most varieties, but has not been grown successfully on our muck. Oz., 20c; ¼ lb., 60c; 1 lb., \$2.00, postpaid.

★Hanson Forms large flat head, outer leaves are bright green, inner leaves white, quality good. Oz., 15c; ¼ lb., 40c; 1 lb., \$1.50, postpaid.

Brown Dutch Forms a good firm head, yellowish buttery inside and of good quality. Oz., 15c; ¼ lb., 40c; 1 lb., \$1.50, postpaid.

Brown Curled A curled or crisp heading variety, medium, dark brown, leaves quite curly. The texture is rather coarse but the quality is good. Oz., 15c; 1/4 lb., 40c; 1 lb., \$1.50, postpaid.

California Cream Butter or Royal Summer Cabbage A popular variety for Autumn and Winter use. Forms a large head, which is very buttery, and of a rich golden yellow inside. Oz., 15c; ¼ lb., 40c; 1 lb., \$1.50, postpaid.

Romaine or Early White Self-Folding Lettuce We consider this the very best strain of the Cos variety. Very uniform in type, and forms a compact, firm head. Color dark green outside and beautifully blanched inside. Very crisp; sweet. Oz., 15c; <sup>1</sup>/<sub>4</sub> lb., 40c; 1 lb., \$1.50, postpaid.

GATUR HIDE MULCH PAPER. Have you tried it? It helps to produce bigger, better and earlier crops. Eliminates weeding. It will increase your yield and get your product to market earlier in the season. Fully described on page 52. A booklet "The Miracle of Mulch Paper" mailed free upon request.

This variety recommended by the Michigan State College.

# Muskmelons

CULTURAL DIRECTIONS. One ounce will plant 50 hills, one pound an acre. Melons do best in a rich, sandy soil. Hills should be from four to six feet apart. Plant ten to twelve seeds to the hill. Cover seeds with an inch of soil. When danger from frost and insects is past, thin to four good plants to the hill.

★Honey Rock (New). The fruit is round, slightly flattened at the ends, of medium size, about midway between Bender and Hearts of Gold. The flesh is soft pink, with a greenish tint and of excellent quality. It is earlier than the Hearts of Gold, grades out well and is an excellent shipper. Oz., 50c; ¼ lb., \$1.50; 1 lb., \$5.00, postpaid.

★Hearts of Gold Original strain, grown by the late Roland Morrill. We still have a little of this pedigreed seed to offer, subject to being sold out. Oz., 40c; ¼ lb., \$1.25; 1 lb., \$4.00, postpaid.

★Hearts of Gold Grown from Morrill Pedigreed melon seed in the trade. Oz., 20c; ¼ lb., 50c; 1 lb., \$1.50, postpaid.

Lake Champlain Very early, fifty-seven days from seed to market. A medium-sized melon, nicely netted, flesh deep, sweet and melting, of golden yellow color. Immensely productive. The market gardener has long been looking for the Lake Champlain. It is a money maker. Oz., 20c; 1/4 lb., 50c; 1 lb., \$1.50, postpaid.

Extra Early Osage A very fine melon of the Osage type. Seed cavity very small. Flesh deep, rich yellow color, very sweet and delicious. At least one week earlier than the Osage melon, smaller, vine prolific. Oz., 15c; 1/4 lb., 40c; 1 lb., \$1.50, postpaid.

★Extra Early Knight The earliest high quality melon and especially adapted for growing in the far North. A medium-sized variety with oblong fruit distinctly ribbed and well covered with a close gray netting; skin deep green, turning to golden at maturity; flesh fairly thick exceedingly sweet and of a bright green color. Worthy of a place in every garden. Oz., 15c; ¼ lb., 40c; 1 lb., \$1.50, postpaid.



Extra Early Osage.



Hearts of Gold

Early Hackensack An early selection, maturing from old Hackensack, fruit somewhat smaller, irregularly ribbed, coarsely and heavily netted; flesh green, thick and of a fine quality. Oz., 15c; ¼ lb., 40c; 1 lb., \$1.50, postpaid.

Hoodoo Vine vigorous, quite blight-resistant and medium size; quality, sweet and delicious. Oz., 15c; ¼ lb., 40c; 1 lb., \$1.50, postpaid.

**Emerald Gem** unquestionably one of the best and earliest melons for home garden and local markets and in our opinion the best for quality; of medium size, a flattened globe in form, irregularly and distinctly ribbed and lightly netted; color deep emerald green; flesh very thick, sweet and of rich salmon color; seed cavity exceedingly small. Oz., 15c; ¼ lb., 40c; 1 lb., \$1.50, postpaid.

Honey Dew Fruit large, surface smooth and hard Honey Dew without ribbing or netting, flesh light emerald green, thick, very tender and melting with an extreme sweetness found in no other melon. Is an excellent shipping and keeping sorts. Oz., 15c <sup>1</sup>/<sub>4</sub> lb., 40c; 1 lb., \$1.50, postpaid.

Edwards' Perfecto Fruit very uniform in size, nearly hard, gray netting. Flesh very thick and of a beautiful salmon color, shading to green as it nears the rind. Perfecto has the deepest flesh and smallest seed cavity of any type of the Rocky Ford. Good shipping melon, extremely productive and most delicious eating. The coming market melon. Oz., 15c; 1/4 lb., 40c; 1 lb., \$1.50, postpaid.

**Osage** A rather large, oval melon of very superior quality, fruit dark green, slightly ribbed and orange-salmon, exceedingly thick, with a small seed cavity. Oz., 15c; ¼ lb., 40c; 1 lb., \$1.50, postpaid.

**Rocky Ford** The fruit is small, almost round, smooth, showing no ribs, and densely covered with a heavy hard gray netting; flesh thick and deep green, showing a faint lining of pink or goli at the center; of the highest quality. An excellent shipper. Oz., 15c;  $\frac{1}{4}$  lb., 40c; 1 lb., \$1.50, postpaid.

★Bender Surprise A new yellow-fleshed melon, becoming very popular in the East. A splendid keeper and shipper. Melon is large netted, flesh very deep. sweet, and delicious. Oz., 15c; ¼ lb., 40c; 1 lb., \$1.50, postpaid.

Milwaukee Market The skin is light green, fruits nearly round with slight sutures; fiesh salmon, wonderfully sweet, with almost no stringiness. Our strain has been improved by careful selection and for a fine home melon and a market variety it has no superior. Oz., 15c; 1/4 lb., 40c; 1 lb., \$1.50, postpaid.

★ This variety recommended by the Michigan State College.

# **Selected Varieties of Watermelon**

CULTURAL DIRECTIONS. One ounce to 30 hills, about three pounds per acre. Watermelons want rich, sandy soil. Cultural directions the same as for Muskmelons, except the hills should be eight feet apart.

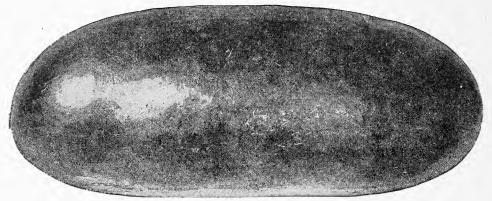
**Cole's Early** One of the earliest melons; small, sel-dom more than twelve inches long. Flesh red and sweet; rind thin and brittle. Not a good shipper, but good for home garden and early market. Oz., 10c; ¼ lb., 30c; 1 lb., 90c, postpaid.

Halbert Honey Very similar to Kleckley's Sweet, but is blunt at both ends. For home mar-ket and garden it has no rival, but it is not a good shipper. Oz., 10c; ¼ lb., 30c; 1 lb., \$1.00, postpaid.

Sweetheart A medium early variety growing to a large size; a heavy, round to oblong form with rather thick, tough rind and a good shipper. Color very light green, flesh bright red and seeds black. Oz., 10c; ½ Ib., 30c; 1 Ib., 90c, postpaid.

Peerless or Ice Cream An old standby. Medium early, light green, mottled and veined; flesh scarlet, solid to center, sweet, melting and delicious. Not a good shipper. Oz., 10c; ¼ lb., 30c; 1 lb., \$1.00, postpaid.

Citron, Red Seeded The old well known red seeded preserving melon. Oz., 10c; 1/4 1b., 30c; 1 lb., \$1.00, postpaid.



\* Kleckley Sweet Watermelon.

★Kleckley's Sweet or Monte Cristo One of the sweetest melons Alterney's Sweet of monte of solutions we etest melons on the market, medium early, long, averaging 18 to 20 inches, slightly tapering to the stem end. Rind very dark green, flesh very bright rich red and ripens nearly to the rind. Too tender for a shipping melon, but excellent for market and home gardens. Oz., 10c; 1/4 lb., 30c; 1 lb., \$1.00, postpaid.

**Excel** Largest of the shipping melons, of good flavor, midseason. Similar in shape to Tom Watson but thicker. Color is dark green with wide bands of darker shape. Very prolific and averages more large melons than any other variety. Oz., 10c; 1/4 lb., 30c; 1 lb., \$1.00, postpaid.

**Irish Grey** Wonderful in yield. Will produce more sparkling red flesh is very sweet and delicious and has no hard, unripe centers and is never stringy. The flesh is firm and will not break when sliced. The size flesh is firm and will not break when sliced. The size is always large. Shape long. Earlier than Tom Wat-son. Will keep in good condition long after being picked. Oz., 10c; ¼ lb., 30c; 1 lb., \$1.00, postpaid.

Tom Watson Produces melons 18 to 24 inches long by 10 to 12 inches in diameter, weigh-ing 40 to 50 pounds, on rich soil. Flesh deep ret and very crisp; melting and of exquisite flavor. Good shipper. Oz., 10c; ¼ lb., 30c; 1 lb., 90c, postpaid.

# Mustard

Southern Giant Curled Mustard.

1 lb., \$1.00, postpaid.

The leaves are used as a salad or may be boiled like spinach. Sow seed in any good garden soil early in the Spring in rows  $1\frac{1}{2}$  to 2 feet apart and when well up thin out the plants so they stan 1 8 or 10 inches apart. By making several sowings a week the tender leaves may be had throughout the season. One ounce will sow 50 feet of row.

Southern Giant Curled Plant vigorous and hardy, upright spread-large, green tinged yellow, much crumpled and frilled at the edges. Oz., 15c; 1/4 lb., 30c; 1 lb., \$1.00, postpaid.

Fordhook Fancy A vigorous growing mild beautifully curled and fringed. Fine for salads and garnishing. Oz., 15c; 1/4 lb., 30c;

# Okra or Gumbo

Very wholesome. The pods when young, make fine soup, and are also used in mixed vegetable soups. Plant after the ground is warm and dry in drills 3 feet apart, thinning the young plants to 1 foot apart. Make early and late sowings to secure a supply throughout the season. Easy to grow in any good garden soil.

White Velvet Plants 3<sup>1</sup>/<sub>2</sub> feet high, pods white, long, smooth, and tender; early and productive. Oz., 15c; <sup>1</sup>/<sub>4</sub> lb., 25c; 1 lb., 75c, postpaid.



White Velvet Okra.

+ This variety recommended by the Michigan State College.

# **Choice Onion Seed**

CULTURAL DIRECTIONS. One ounce to 100 feet of drill; about four pounds to the acre. Onions for the market are generally grown on muck land in Michigan, but may be grown for home use on any rich, loamy soil. They appreciate plenty of fertilizer on muck; the market growers apply heavily about a 10-10

muck; the market growers apply heavily about a 10-10 fertilizer. Drill in rows about a foot apart. As soon as the weeds appear, weed carefully and give shallow cultivation. Sow as early as possible in Spring. ★ Southport Yellow Globe low Globe Danvers. Not quite so early, but much heavier yielder and not flat across the bottom. Color beautiful golden; the best main crop sort. Oz., 20c; 14 lb., 60c; 1 lb., \$2.00, postpaid.

★ Connecticut Yellow Globe Onions Onions are round, globe shaped. Not so long as the Southport, but said to be much better keepers. Very few stiff necks, rich yellow color. Will keep well into the Spring months. Seed grown in Connecticut. Oz., 20c; <sup>1</sup>/<sub>4</sub> lb., 65c; 1 lb., \$2.25, post-

Michigan Yellow Globe Earlier than Southport, but Oz., 20c; ½ lb., 60c; 1 lb., \$2.00, postpaid. Ohio Yellow Globe The best of the Yellow Globe va-orange-yellow, and the flesh is white, and fine grained. The bulbs are remarkably uniform in size and shape, and being firm and hard possess fine keeping and shipping qualities. Oz., 20c; ¼ lb., 60c; 1 lb., \$2.00, postpaid.

postpaid. Yellow Globe Danvers A very popular dependable variety. Is an exceptional keeper. Oz., 20c; ¼ lb., 65c; 1 lb., \$2.25, postpaid. ★Southport White Globe Of the true Southport form, with a thin, delicate skin of purest paper whiteness; flesh is very crisp, snowy white in color and exceedingly mild; usually commands the highest price in the market. Oz., 25c; ¼ lb., 80c; 1 lb., \$2.75, postpaid.



Champion Moss Curled Parsley.

# **Parsnips**

CULTURAL DIRECTIONS. One ounce will sow 100 feet of drill; three to four pounds per acre. Sow in April or May. Parsnips require a long season to ma-ture. Sow thickly and thin as for Carrots, as seed does not germinate well unless conditions are just right.

Hollow Crown Thick shoulder. This variety is bet-ter known and more generally grown than any other sort; roots smooth, tender and sugary. Oz., 10c; ¼ lb., 30c; 1 lb., 90c, postpaid.

Long Smooth Dutch or Sugar Roots very long, slim and much sweeter than the Hollow Crown. Oz., 10c; 1/4 lb., 30c; 1 lb., 90c; postpaid.

★Southport Red Globe Same shape as the Southport Yellow but color very dark. Better keeper than the Yellow, but not so good a seller. Oz., 20c; ¼ lb., 60c; 1 lb., \$2.00, postpaid. Prizetaker or Mammoth Yellow Spanish Very large, and nearly Same shape as the Southport

round, light straw color, very mild and nearly Oz., 30c; <sup>1</sup>/<sub>4</sub> lb., 90c; 1 lb., <sup>\$3.00</sup>, postpaid. Red Wethersfield One of the oldest and best known American type, large, rather flat, deep purplish red in color. Oz., 20c; <sup>1</sup>/<sub>4</sub> lb., 60c; 1 lb., <sup>\$2.00</sup>, postpaid.

White Portugal or Silverskin Used mostly to grow sets. An early flat, white onion of mild flavor. Oz., 30c; <sup>1</sup>/<sub>4</sub> lb., 90c; 1

White Welch While it forms no bulbs it is one of the best for bunching as green onions. A very hardy perennial. The white shoots make a rapid growth and are ready for market ahead of those from sets. Very mild and delicate in flavor. Oz., 30c; 1/4 lb., 90c; 1 lb., \$3.00, postpaid.

New Long White Bunching Onion small quantity of this seed for trial purposes this year, but for selling it is not available until another year. Anyone inter-ested can secure a small sample packet, Free of Charge, as long as our supply lasts.

#### **Onion Sets**

Sets are used where an early crop of Onions is desired; either for the early green bunching Onions or the matured Onions in the Fall. These sets are the best that can be procured, but shipment cannot be made before March 1st on account of freezing weather.

Yellow Bottom Sets. Write for prices. White Silverskin Sets. Write for prices. Red Bottom Sets. Write for prices. Egyptian or Perennial Top Sets, write for prices.

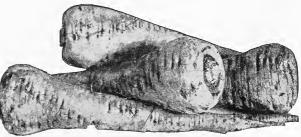
# Parsley

CULTURAL DIRECTIONS. One ounce to 150 feet of drill. Seed germinates very slowly. Sow thickly in rows about 15 inches apart, and thin to four or five inches apart in the row. Parsley will live through the Winter without protection, and if plants are left, there will be plenty for early Spring use, but will soon go to seed. Will last longer the second year if sown in the Fall in the Fall.

Champion Moss Curled Has the appearance of finely curled moss; hardy, slow to run to seed. Oz., 10c; 1⁄4 lb., 30c; 1 lb., \$1.00, postpaid.

Triple Curled Plant handsome, beautifully curled and rapid grower. Will produce a large crop. Oz., 10c; <sup>1</sup>/<sub>4</sub> lb., 30c; 1 lb., \$1.00, postpaid.

Hamburg Rooted Grown for the root which re-sembles a parsnip in shape and color. Foliage very much like plain parsley. Oz., 10c; 1/4 lb., 30c; 1 lb., \$1.00, postpaid.



Hollow Crown Parsnips.

+This variety recommended by the Michigan State College.

# **Garden Peas**

CULTURAL DIRECTIONS. One quart will plant 100 feet of drill; about 56 pounds per acre. Peas do best on rich, sandy loam that has been well manured the previous season. Plant smooth, early sorts as soon as the ground can be worked in the Spring. The wrinkled varieties are liable to rot if the soil is cold and wet, and should be planted later.

★ Dark Podded Sutton's Excelsion An excellent extra early, dwarf variety, of highest quality. Height 14 inches, foliage dark green. Vine stout and healthy. Pods 3½ inches long, straight, round and square ended, containing six to eight large, dark green peas. Exceedingly productive. Lb., 30c; 5 lbs., \$1.25; pk., \$2.75; bu., \$10.00.

Little Gem A second early, hardy variety. Prolific, beginning near the ground. Pods medium length, round, and well filled to the end. Height of vine about fifteen inches. Seed green, wrinkled. Lb., 30c; 5 lbs., \$1.00; pk., \$2.50; bu., \$9.00.

★ Little Marvel One of the most prolific of the second early sorts. Pods long, 3 to 4 inches, well filled with deliciously sweet peas. Vines about 15 inches in height. Lb., 30c; 5 lbs., \$1.25; pk., \$2.75; bu., \$10.00.

Alaska A small, smooth blue Pea, and one of the earliest. Grown largely by canners and market gardeners for early crop. Vines about two feet in height, pods small, but well filled. Can nearly all be harvested at one picking. Lb., 30c; 5 lbs., \$1.00; pk., \$2.50; bu., \$9.00.

**Dwarf Telephone** A splendid main crop Pea, coming between the Telephone and Stratagem. Of the Stratagem type, but a heavier yielder. Height 2½ feet. Foliage very heavy, sturdy and dark green. Pods 4½ inches long, dark green, broad, straight and pointed, containing nine large, medium dark green peas of the best quality. Lb., 30c; 5 lbs., \$1.25; pk., \$2.75; bu., \$10.00.

★ Alderman A little later than the Telephone. Vines about four feet in height; very heavy foliage. One of the most productive sorts. Pods long, dark green, well filled; seed wrinkled. Lb., 30c; 5 lbs., \$1.00; pk., \$2.50; bu., \$9.00.

★ World's Record A new variety on the order of Gradus, which it resembles in many ways; might well be considered an improvement on that sort, being slightly earlier, more productive and true to a fixed type. Grows about 2 feet in height, with large, dark green pods nearly 4 inches in length. broad, pointed and always well filled with large, sweet peas of splendid quality. An excellent profitable sort for home or market garden. Lb., 30c; 5 lbs., \$1.25; pk., \$2.75; bu., \$10.00.

★ Thomas Laxton for the best second early sorts of same height as the Gradus, but a little earlier, more hardy and productive. Pods long, blunt ended and well filled with large peas. Peas wrinkled. Lb., 30c; 5 lbs., \$1.25; pk., \$2.75; bu., \$10.00.

Telephone A standard high quality, large-podded Pea, for main crop; productive; height 4½ feet. Vine and foliage strong and heavy, medium green. Pods 4½ inches long, medium green, straight, broad and pointed, well filled. Lb., 30c; 5 lbs., \$1.00; pk., \$2.50; bu., \$9.00.

★ Improved Laxtonian The best of the Laxtonian type. Second early. A little earlier than the Gradus. Vine 16 inches high, sturdy, dark green and productive; pods dark green, four inches broad, containing eight large peas of excellent quality. The best second early, big-podded sort. Lb., 30c; 5 lbs., \$1.25; pk., \$2.75; bu., \$10.00.



★ Thomas Laxton Peas.

American Wonder One of the earliest and sweetest wrinkled Peas. Vines very dwarf and productive. Pods small, but well filled. The most delicious Pea for the home garden. Lb., 30c; 5 lbs., \$1.00; pk., \$2.50; bu., \$9.00.

Nott's Excelsior A standard extra early dwarf Pea. Height about one foot; foliage medium green, stout and heavy, pods light green, three inches long, round, straight and blunt ended, containing six light green peas of high quality; productive. Lb., 30c; 5 lbs., \$1.25; pk., \$2.75; bu., \$10.00.

Horsford's Market Garden A very productive main crop sort. Height 3 feet. Vines and foliage dark green, pods medium green, 3 inches long, almost round and blunt-ended; well filled with six or seven light green peas of good quality. Lb., 30c; 5 lbs., \$1.00; pk., \$2.50; bu., \$9.00.

Champion of England Vines 4 to 5 feet in height, productive. Pods 2 to 3 inches long, broad and well filled. Peas medium size, of unsurpassed sweetness. Lb., 30c; 5 lbs., \$1.00; pk., \$2.50; bu., \$9.00.

Dwarf Gray Sugar A dwarf, edible pod variety. Vines about two feet high. Cook pods like string beans. Lb., 30c; 5 lbs., \$1.25; pk., \$2.75; bu., \$10.00.

Melting Sugar, or Edible Pod A tall variety, bearing large, flat, brittle pods. These are sweet and are cut or broken and cooked like string beans. It is a delicious vegetable and should be better known and more generally used. Lb., 40c; 5 lbs., \$1.40; pk., \$3.00; bu., \$11.00.

We prepay postage on one pound; but larger quantities are quoted f. o. b. Grand Rapids.

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+This variety recommended by the Michigan State College.



\* Chinese Giant Pepper. Peppers

CULTURAL DIRECTIONS. One ounce will produce about 2,000 plants; about 7,000 plants for an acre. Sow seed in hotbeds from February to April; transplant to open ground when all danger from frost is past, in rows about three feet apart and eighteen inches apart in the row. Seed can be sown in the open ground late in May, and thinned as above. Cover seed about half an inch.

★Harris Earliest The earliest large pepper grown. Plant dwarf, compact in habit of growth. Most prolific. Peppers bell-shaped, about 4 inches long. They produce an enormous crop of fruits, which are perfectly mild and sweet. Oz., 50c; ¼ lb., \$1.75; 1 lb., \$6.00, postpaid.

Early Giant (Harris). The earliest and most prolific Harris' Earliest, is of dwarf, compact growth, bearing as many as 12 pendent fruits on a single plant. Fruit, scarlet, measuring 5 inches long by 3½ inches in diameter; 3 lobed, mild and sweet. A profitable pepper for the market. Oz., 50c; ¼ lb., \$1.75; 1 lb., \$6.00, postpaid.

### **Pumpkins**

CULTURAL DIRECTIONS. One ounce of seed for 20 hills. About 3 pounds per acre. Usually grown in cornfields, but can be grown as a separate crop. Seed should be planted in hills eight to ten feet apart each way, after soil gets warm. Cultivate often until vines begin to run. Cut pumpkins after leaves die, leaving three to four inches of stem attached to fruit. Store in a dry place, and do not bruise.

**Connecticut Field** Generally used for planting in corn for stock feeding; also makes good pies. Oz., 10c; 1/4 lb., 20c; 1 lb., 75c, postpaid.

King of the Mammoths The giant among pumpkins. Often grows two feet or more in diameter. Oz., 10c; 1/4 lb., 30c; 1 lb., \$1.00, postpaid.

Sugar Pie Fruit small, round, flattened at the ends, and slightly ribbed. Skin and flesh deep orange-yellow. Flesh very thick and of high quality. Oz., 10c; 1/4 lb., 30c; 1 lb., \$1.00, postpaid.

Japanese Pie A large crook-necked sort. Skin green, striped yellow. Flesh yellow and of fine quality. Oz., 10c; ¼ lb., 30c; 1 lb., \$1.00, postpaid.

Golden Oblong One of the best pie and canning Pumpkins. Oblong in shape, averaging about twenty by ten inches. Skin golden yellow and very tough, making an excellent keeper. Flesh very thick, yellow and of fine quality and never stringy. Heavy yielder and fruit solid and heavy. Oz., 10c; 1/4 lb., 25c; 1 lb., 75c; postpaid. ★ Chinese Giant Mammoth fruits, twelve to fifteen inches in circumference. Flesh thick, tender, mild and sweet. Oz., 50c; ¼ lb., \$1.75; 1 b., \$6.00, postpaid.

Bull Nose or Large Bell Large bell-shaped, thickfleshed fruit. Good for Mango pickles. Oz., 50c; 1/4 lb., \$1.50; 1 lb., \$4.50, postpaid.

Long Red Cayenne Pendent fruits about five inches long and three-fourths inch in diameter at the base, often curved and twisted; bright red, hot and pungent. Oz., 40c; <sup>1</sup>/<sub>4</sub> lb., \$1.25; 1 lb., \$4.00, postpaid.

Royal King A new sweet pepper of the Ruby King type. The fruit will average 4 inches in length, is deep green in color, turning a bright red when ripe. The flesh is thick and sweet. Oz., 45c; ¼ lb., \$1.40; 1 lb., \$5.00, postpaid.

Ruby King one of the most profitable and satisfacgarden, plants are early, productive and of dwarf compact, upright growth, fruits pendent, often 4 to 6 inches long by 3 to 4 inches thick, tapering and of a bright ruby-red color; flesh is thick, mild and sweet. Oz., 40c; ¼ lb., \$1.25; 1 lb., \$4.00, postpaid.

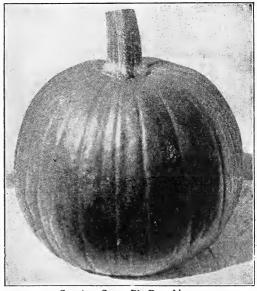


Early Giant Pepper.

World Beater The most prolific large pepper. Fruit very large, about five inches long. Flesh thick, mild and sweet. Pepper tapering and of a bright ruby color when ripe and very attractive. Price, postpaid, oz., 50c; <sup>1</sup>/<sub>4</sub> lb., \$1.75; 1 lb., \$6.00. **Red Chili** Small, red, coneand prolific. Used for seasoning. Oz., 40c; <sup>1</sup>/<sub>4</sub> lb., \$1.25; 1 lb., \$4.00, postpaid.

Pimento A rather late, very thick fleshed, heartshaped, smooth, mild crimson variety, much used for salads. Oz., 40c; 1/2 lb., \$1.25; 1 lb., \$4.00, postpaid.

Sweet Golden Dawn  $^{A}_{s o m e}$ , sweet, mild, yellow variety; fruit pendent,  $1\frac{1}{2}$  inches long and about the same in diameter. Oz., 40c;  $\frac{1}{4}$  lb., \$1.25; 1 lb., \$4.00, postpaid.



Sweet or Sugar Pie Pumpkin.

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★This variety recommended by the Michigan State College.

# Radishes

CULTURAL DIRECTIONS. One ounce to 100 feet of drill; about five pounds to the acre. Sow in rows about 12 inches apart in rich, sandy loam. Use no fresh manure, as the radishes will not grow smooth and will be wormy. Later sowings can be made at intervals during the Summer. Seeds of Winter radishes should be sown in July or August, and radishes can be kept during the Winter if covered with sand and kept in a cool cellar.

#### **★** Grand Rapids Forcing Radish

The best greenhouse variety and the earliest. Has a very tender skin and will not stand heavy forcing. Don't let it dry off in the bench and then water heavily or it will split. When properly grown it is the most handsome and best forcing sort with the shortest top and the radishes are ready to pull before you realize it on this account. Price, postpaid, oz., 10c; <sup>1</sup>/<sub>4</sub> lb., 30c; 1 lb., \$1.00.

★Vick's Scarlet Globe has been tested by having crops grown both in greenhouses and outdoors. Our new stock will not be sold until it is tested. It is one of the earliest of the forcing radishes, and does equally as well for outdoor culture. Roots are globeshape, of fair size, not apt to be pithy, small tops, crisp and tender. Color a bright scarlet. Oz., 10c; ¼ Ib., 30c; 1 lb., 90c, postpaid.

Crimson Giant Larger than any other extra early variety but does not become pithy. Crimson-carmine, turnip shaped, flesh firm, crisp and tender. Oz., 10c; ¼ lb., 25c; 1 lb., 90c, postpaid.

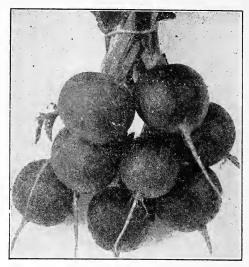
**Cincinnati Market** Grows straight and smooth, 6 to 7 inches long. The tops are small, the skin a beautiful scarlet, very thin flesh, crisp and brittle. Wonderful flavor. Oz., 10c; ¼ lb., 25c; 1 lb., 90c, postpaid.

French Breakfast Of oblong shape, small, quick growing, color rose-scarlet, with small white tip. Oz., 10c; <sup>1</sup>/<sub>4</sub> lb., 25c; 1 lb., 90c, postpaid.

Scarlet Turnip White Tipped Round, deep ing to a white tip at the bottom. Very early. Oz., 10c; ¼ lb., 25c; 1 lb., 90c, postpaid.



White Icicle Radishes,



🛨 Grand Rapids Forcing Radish.

Long Scarlet Short Top Roots are smooth very short tops. Color bright carmine red. Oz., 10c; 1/4 lb., 25c; 1 lb., 90c, postpaid.

Half-Long Deep Scarlet A half long, of a beautiful deep scarlet color. Does not become pithy as soon as long scarlet varieties. Oz., 10c; 1/4 lb., 25c; 1 lb., 90c, postpaid.

White Globe One of the best of the white varieties, either for forcing or out-door culture; more round than turnip-shaped; intermediate in size, always crisp, fine grained and tender. Oz., 10c; ¼ lb., 25c; 1 lb., 90c, postpaid. ★ lcicle One of the earliest long varie-ties, white throughout. Very crisp and tender. Oz., 10c; ¼ lb., 25c; 1 lb., 90c, postpaid.

★Cooper's Sparkler, White tip, quite simnip White Tip as to size and time of maturity, only the Sparkler is more round or ball-shaped, and the white extends farther up the Radish, making a more attractive bulb. Oz., 10c; ¼ Ib., 25c; 1 Ib., 90c, postpaid.

★ Vick's Scarlet Globe Radishes.

# The Best Winter Radishes

White Winter (Celestial). Roots six to eight inches long, thick, cylindrical and smooth, with a beautiful white skin and flesh, the whitest and least pungent of the winter radishes. Oz., 10c; <sup>1</sup>/<sub>4</sub> lb., 25c; 1 lb., 90c; postpaid.

Chinese Rose Winter Roots four or five inches long, blunt at both ends, about two inches thick. Skin smooth and bright, deep rose color. Flesh white and crisp. One of the best Winter sorts. Oz., 10c; 1/4 lb, 25c; 1 lb., 90c; postpaid.

Long Black Spanish One of the latest and hardiest varieties for Winter use; roots eight to nine inches long, two to three inches in diameter, and nearly black in color. Oz., 10c; 1/4 lb., 25c; 1 lb., 90c, postpaid.

Round Black Spanish Round, three to four inches in diameter. Skin almost black; flesh white, crisp and pungent. Oz., 10c; 14 1b., 25c; 1 lb., 90c, postpaid.

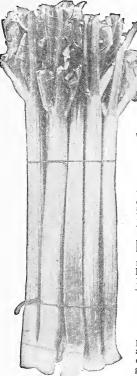
 $\star$  This variety recommended by the Michigan State College.

### Rutabagas

CULTURAL DIRECTIONS. One ounce to 100 feet of drill; one pound to the acre, if sown in drill rows. Spring sowing should be done very early, so that the 'bagas may get their growth before hot weather, or they will be pithy and bitter. For main crop sow in July or August.

American Purple Top A hardy, productive variety, with small small tap-root. Color bright yellow with purple top. Flesh solid, tender and sweet. Oz., 10c; 1/4 lb., 25c; 1 lb., 75c, postpaid.

Long Island, Improved Grows large, top-shaped, purple top, flesh yellow. Used for stock feeding or table use where a large Rutabaga is wanted. Oz., 10c; 1/4 lb., 25c; 1 lb., 75c, postpaid.

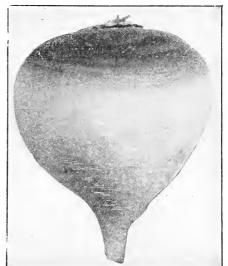


Victoria Rhubarb.

in thoroughly tested seeds.

### Rhubarb

CULTURAL DIRECTIONS. One ounce will produce 100 plants. The seed should be sown in the Spring in rows about eighteen inches apart and transplanted the next Spring to permanent beds. Roots should be planted three or four feet apart, and well manured, either with well-rotted stable manure or Pulverized Hen Manure. Give thorough cultivation.



American Purple Top Rutabaga.

Victoria One of the best market sorts; stalks a beautiful red. Oz., 20c; 1/4 lb., 60c; 1 lb., \$2.00, postpaid.

### Salsify or Vegetable Oyster

CULTURAL DIRECTIONS. One ounce to 75 feet of drill; five or six pounds to the acre. Sow the seed early in the Spring in drills twelve inches apart and one inch deep. Thin to four or five inches apart. The roots will be ready for use in October, when a supply should be taken up and stored like carrots for Winter use. Like parsnips, they may be left in the ground all Winter and dug as soon as the ground is thawed.

Mammoth Sandwich Island A splendid variety producing large, thick, tapering while roots, very uniform, mild and delicious in flavor. A popular sort with the market gardeners. Oz., 20c; 1/4 lb., 60c; 1 lb., 82.00, postpaid.

# Your Garden

Your garden and what you raise is getting more prominent every day. Many of the Women's Clubs are advocating planting a garden, and many varieties are so easily grown that a few small rows of each kind will give you the fresh, succulent vegetables that you cannot find in any market or grocery store. While we do not put out packet seeds, as such, we do offer to give you:

1 pkt. Beans, Pencil Pod Black Wax.

1 pkt. Sweet Corn, Early Evergreen.

1 pkt. Spinach, Round Summer Thick

1 pkt. Turnip, Purple Top White

1 pkt. Cucumber, Early Fortune.

1 pkt. Peas, Early Alaska.

Leaf.

Globe.

#### 12 Large Size Packets of Any Kind of Vegetable Seeds Postpaid for \$1

Our seeds are all put up out of our bulk stock and you are assured of the best Below we give you a suggestive list:

- 1 pkt. Leaf Lettuce, Early Curled Simpson.
- 1 pkt. Radish, Vicks Scarlet Globe.
- 1 pkt. Carrots, Chantenay.
- 1 pkt. Beets, Crosby's Egyptian.
- 1 pkt. Cabbage, Early Copenhagen Market.
- 1 pkt. Swiss Chard, Lucullus.

We have only given you the variety to let you know what we would advise; however, if you desire to make your own selection, do so, as you may have a preference that we are not aware of.

Our Prize Winning Flower Seed Collection is found on the inside back cover. If you love flowers, avail yourself of this offer.

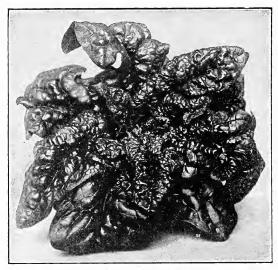


Salsify.

# **Spinach** Pure Seed, and Improved Varieties

Cultural Directions. One ounce to 100 feet of drill; eight to ten pounds per acre. Sow thinly in drills, twelve to fifteen inches apart and about half an inch deep. Thin plants to four inches apart in the row. Sow early for Spring crop, in August for Fall use; and if sown from the middle to last of September, and protected during the Winter with a light covering of straw, it will be ready for use very early in the Spring.

Long Standing Bloomsdale Savoy A new strain worthy of hardy and a decided improvement on the old strain. Will stand ten to fourteen days longer before bolting into seed; has a heavier leaf texture, more crumpled or savoyed and will also resist the heat much better. Oz., 10c; <sup>1</sup>/<sub>4</sub> lb., 20c; 1 lb., 50c, postpaid.



Virginia Savoy Blight-Resistant Spinach.

Virginia Savoy Blight-Resistant Spinach Was originated by the Virginia Truck Experiment Station. It is the result of years of scientific work by the experiment station, and has proved a great success the past three years. It is a decided improvement over Bloomsdale or Norfolk Savoy, as its blight-proof qualities and correct habit of growth make it more valuable to the grower than any other variety. Virginia Savoy is characterized by the large leaves and general Flanders type of growth. The low-growing, wide-spreading habit makes it most desirable for Winter Spinach. Plants of this type attain a very large size in late Fall and carry well into early Spring. A single plant often weighs more than a pound. Oz., 10c; ¼ lb., 20c; 1 lb., 50c, postpaid.

Round Summer Thick Leaved An old standard. Grand Rapids growers use this variety very largely for main crop for Spring, Summer and Fall. Oz., 10c; 1/4 lb., 15c; 1 lb., 35c, postpaid.

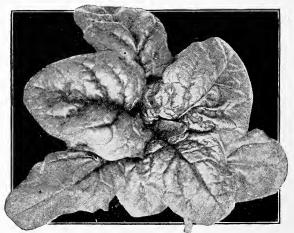
★ Victoria Makes a flat rosette with very short stems. The leaves are large, thick and wrinkled, blunt or rounded, and dark green in color. Stands hot weather well; slow to go to seed. Oz., 10c; ¼ lb., 15c; 1 lb., 35c, postpaid.



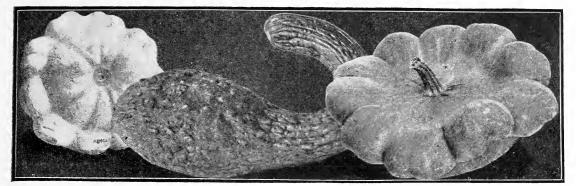
★ King of Denmark Spinach A standard variety for market gardeners, for Spring planting. It will stand longer than any other variety before going to seed. Leaves large, rounded, and somewhat blistered. Color very deep green. Heavy yielder and excellent quality. Oz., 10c; ¼ lb., 20c; 1 lb., 50c, postpaid.

New Zealand Entirely distinct from the true Spanish; plant tall and spreading, leaves medium green, rather small and pointed, grows well in hot weather and under adverse conditions. Oz., 15c; ¼ Ib., 25c; 1 lb., 75c, postpaid.

Princess Juliana A new and better variety for the market gardener. It is said to be the most thoroughbred type of long standing Spinach ever introduced. In form it is a dense, compact rosette with very short petioles; the leaves are large and rounded, thick in texture, very much blistered and crumpled and of an intense, very dark green color; will hold up well in shipping and is slow to run to seed. Oz., 10c; 1/4 lb., 20c; 1 lb., 50c, postpaid.



Thick Leaved Spinach.



Early White Bush Scallop.

Giant Summer Crookneck.

Early Yellow Bush Scallon.

# oquash

CULTURAL DIRECTIONS. For Summer squash, one ounce to 25 hills; two to three pounds per acre. For Winter squash, one ounce to the hills; about three pounds per acre. After danger of frost is past plant eight to ten seeds to the hill for Summer sorts, about four feet apart, the last of May; and Winter varieties in hills about eight feet apart, from the middle of June to July first. Do not bruise or break the stems of Winter squash when gathering. Store in a cool, dry place.

Giant Summer Crookneck The largest and one of the earliest summer varieties, fruits often 2 to 2½ feet long, very warty and deep orange in color. Oz., 15c; ¼ lb., 35c; 1 lb., \$1.25, postpaid

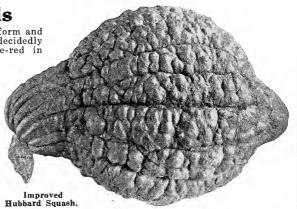
Golden Summer Crookneck A standard early and pro-ductive summer squash, fruits about a foot long, moderately warted and of a bright yellow color. Oz., 15c; 1/4 lb., 35c; 1 lb., \$1.25, postpaid.

### The Four Hubbards

Golden Hubbard Similar to the old Hubbard in form and habit, though smaller and decidedly earlier; shell moderately warted, rich orange-red in color; flesh deep orange, of fine quality; good keeper. Oz., 15c; <sup>1</sup>/<sub>4</sub> lb., 40c; 1 lb., \$1.50, portrait postpaid.

postpaid. Improved Hubbard The standard Winter Squash. Shell moderately warted; deep dark bronze-green; flesh bright yellow, fine grained, thick and dry. Oz., 15c; ¼ lb., 40c; 1 lb., \$1.50, postpaid. Chicago Warted Hubbard Similar in quality and form to the Hub-

bard, but fruit larger and form to the Hub-bard, but fruit larger and a little later. Oz., 15c; ¼ lb., 40c; 1 lb., \$1.50, postpaid. Blue Hubbard A new type of Hubbard Squash and said to excel all in the supe-rior quality of its flesh. Similar to the original Hubbard but having a hard blue-gray shell. Oz., 15c; ¼ lb., 40c; 1 lb., \$1.50, postpaid.



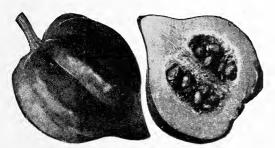


Table Queen Squash,

Italian Cucuzzi Caravazzi A long light green variety, Italian trade. Oz., 50c; <sup>1</sup>/<sub>4</sub> lb., \$1.50; 1 lb., \$5.00, postpaid.

paid.
Cocozella di Napoli (Italian Vegetable Marrow). A bush summer variety, oblong, large. Dark green marbled with yellow and dark green stripes. A vegetable delicacy superior to eggplant. Oz., 15c; ¼ 1b., 40c; 1 1b., \$1.50, postpaid.
Boston Marrow Fall and Winter variety, oval, color when ripe bright orange, fine grained and excellent flavor. Oz., 10c; ¼ 1b., 30c; 1 1b., \$1.00, postpaid.

postpaid.

A Fall and Winter variety, medium size, top-shaped, dark green, flesh orange, very Delicious deep and delicious. Oz., 15c; 1/4 lb., 40c; 1 lb., \$1.50. postpaid.

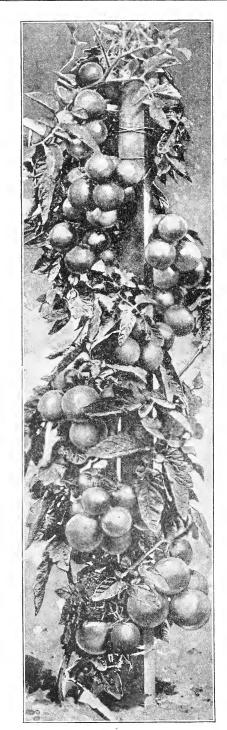
Table Queen A Squash fit for a Queen. Cut in half and baked for twenty minutes, it is delicious. Wonderful producer. The fruits are from 6 to 8 inches long and 4 to 6 inches in diameter. The shell is hard and smooth. Color dark green with sometimes a bloch of red at pointed end. Will keep as long as the Hubbard. Oz., 15c; 1/4 lb., 50c; 1 lb., 5150 method \$1.50, postpaid.

Early White Bush Scallop Very early Summer Squash, also known as Patty Pan. Oz., 15c; 1/4 lb., 35c; 1 lb., \$1.25, postpaid.

Early Yellow Bush Scallop A true bush. Earlier above. Oz., 15c; 1/4 lb., 35c; 1 lb., \$1.25, postpaid.

Pike's Peak, or Sibley A vigorous prolific old stand-ard, oval shape, tapering at the blossom end, skin dark green. Oz., 15c; 1/4 lb., 40c; 1 lb., \$1.50, postpaid.

# Select Tomato Seed



Grand Rapids Forcing Tomatoes. This plant produced 19 lbs. of marketable fruit. CULTURAL DIRECTIONS. One ounce will produce about 3,000 plants; about 5,000 plants to the acre. Tomatoes do best on warm, sandy, rich soil, and make a rapid and unchecked growth in the early part of the season. For main crop, sow seed in greenhouses or hotbeds from the middle of March to the first of April. Transplant to the open field from last of May to June first.

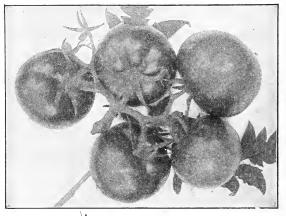
#### **\***Grand Rapids Forcing

The Grand Rapids Forcing is as great an acquisition to the line of forcing vegetables as was the Grand Rapids Forcing Lettuce. The intense sexual vigor of the plant causes a great production of pollen, and insures an immense setting of fruit. It is probably the only tomato that is self-fertilizing. Plant is a vigorous, robust grower, and should be trimmed to about six feet in height. The fruit is a good red color, fair size, firm and meaty. Skin is tough and it will stand shipping for long distances. Under favorable growing conditions each plant should produce eight pounds of marketable fruit. Oz., \$1.50; ¼ lb., \$5.00; ½ lb., \$8.00, postpaid.

Grand Rapids Forcing Select Growers Strain. This strain is the result of years of careful plant selection and breeding by one of our growers. He has developed a superior tomato, larger in size and better in quality as well as flavor. This seed was taken from greenhouse grown tomatoes. Oz., \$2.00; ½ lb., \$12.50, postpaid.

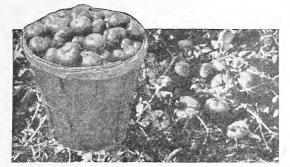
Ideal Forcing A new forcing variety originated by Mr. Eugene Davis and Prof. Waide, now of Ohio, selected the original parent plant of the Ideal Tomato. It is the result of crossing the Bonny Best with the Comet and has the heavy yielding quality and tough skin of the Comet and the high color of the Bonny Best. Mr. Nellis has selected and re-selected the plants until it has arrived at a high state of purity and breeds absolutely true to type. The plant does not grow as tall as the Grand Rapids Forcing but will yield as many pounds per plant. It has no green, unripe core, is dark red in color, not an acid fruit but of excellent quality, and is a larger Tomato and a splendid shipper. During the past year ideal results have been obtained in the greenhouse. Oz., \$3.00; ¼ lb., \$10.00, postpaid.

★Bonny Best As early as Chalk's Jewel. Fruit smooth, solid and uniform. Produced in clusters in center of plant. One of the most productive; color bright red; good shipper. Oz., 30c; ¼ ib., 90c; 1 lb., \$3.00, postpaid.



🖈 Bonny Best Tomatoes.

This variety recommended by the Michigan State College.



🛧 John Baer Tomatoes.

★John Baer did producer. An early, productive, red tomato, on the order of the Chalk's Jewel. Splen-Oz., 30c; ½ lb., 90c; lb., \$3.00, postpaid.

Dwarf Sione The best of the dwarf tomatoes. Fruits large, smooth, very solid, of a deep scarlet color. Oz., 30c; 1/4 lb., \$1.00; 1 lb., \$3.50, postpaid.

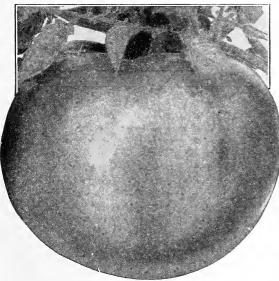
#### Marglobe

#### The Wilt and Nailhead Rust-Resistant Sort.

The Marglobe was produced by crossing the Livingston Globe with one or more other varieties. It is a vigorous grower whether in greenhouse or field. A bright red in color, of large size, almost round, and very productive. It will take the place of many other varieties in greenhouses and sections of the country where wilt prevails. It will pay to try the Marglobe, even if you are not bothered with Tomato disease. It is very promising. Oz., 60c; 1/4 lb., \$1.75; 1 lb., \$6.00, postpaid.

Stone The standard and general favorite with truckers and canners, always dependable, very vigorous and productive, fruits round, large, solid, smooth and deep red in color. Oz., 30c; 1/4 lb., \$1.00; 1 lb., \$3.50, postpaid.

**Ponderosa** A very large, purple-fruited tomato; solid, with but few seeds, and not acid. Fine for slicing. Oz., 40c; ½ lb., \$1.30; 1 lb., \$5.00, postpaid.



Ponderosa Tomato

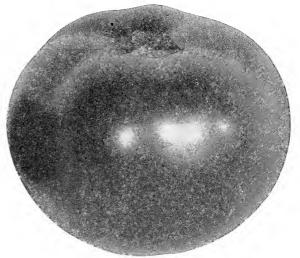
Earliana The most productive, first early red tomato and a profitable sort for the market gardener. Vines are small but vigorous, fruits medium to large in size, exceptionally smooth and solid; color bright deep scarlet. Oz., 30c; ½ Ib., 90c; 1 Ib., \$3.00, postpaid.

Chalk's Early Jewel An exceptionally fine early variety. About ten days later than the Earliana. Fruit round, smooth and solid. Color crimson. Extremely productive. Oz., 30c; ½ lb., 90c; 1 lb., \$3.00, postpaid.

Red Rock A dependable, large, second early variety. A favorite canning sort. Oz., 30c; 1/4 lb., 90c; 1 lb., \$3.00 postpaid.

Landreth An early and exceedingly choice variety. Very productive, fruit large and solid. Oz., 30c; 1/4 lb., 90c; 1 lb., \$3.00, postpaid.

Wayahead A potato-leaved Earliana. Earlier than the Earliana. Smooth red fruit and very prolific; has the heavy yielding qualities of the Earliana and fruit much better. Oz. 50c; 1/4 lb., \$1.50; 1 lb., \$5.00, postpaid.



Marglobe Tomato.

Matchless A fine, smooth, main crop tomato of rich cardinal-red color, with solid flesh of finest quality. Oz., 30c; 1/4 lb., 90c; 1 lb., \$3.00, postpaid.

Red Head A large globe-shape, bright scarlet tomato. Fruit is very smooth, meaty, runs quite uniform size, very productive. Oz., 35c; ¼ lb., \$1.15; 1 lb., \$4.00, postpaid.

June Pink Similar in all respects to Earliana, differing only in having purple fruit: the best extra early purple variety. Oz., 40c; 1/4 lb., \$1.30; 1 lb., \$5.00, postpaid.

#### **Small Tomatoes**

Excellent for preserves, pickling, etc.

YELLOW PLUM	oz.,	15c	postpaid
<b>RED PEAR</b> <sup>1</sup> / <sub>4</sub>	oz.,	15c	postpaid
YELLOW PEAR $\dots 1/4$	oz.,	15c	postpaid
<b>RED PEACH</b> <sup>1</sup> / <sub>4</sub>	oz.,	15c	postpaid

★ This variety recommended by the Michigan State College.

# Turnips

CULTURAL DIRECTIONS. One ounce to 150 feet of drill; one pound per acre. For main crop, sow in July or August. Sow either broadcast or in drills.

Extra Early White Milan The earliest bulbs, small, clear white, and flat. One of the best for early bunching. Oz., 10c; 1/4 lb., 30c; 1 lb., \$1.00, postpaid.

White Egg An early egg-shaped variety. Roots smooth, clear white. One of the best for market. Oz., 10c; 1/2 lb., 20c; 1 lb., 70c, postpaid.

Purple Top White Globe Not so early as White Egg, perfect globe in shape. Flesh and skin white, colored purple or red above ground. Very fine grained and sweet. The most attractive turnip and best seller. Oz., 10c; 1/4 lb., 20c; 1 lb., 70c, postpaid.

Purple Top Strap Leaved A very early, flat variety, medium size; purple or red above ground and white below. Oz., 10c; 1/4 lb., 20c; 1 lb., 60c, postpaid.

**Cow Horn** Roots long, slightly crooked; clear white. Often sown to plow under for fertilizer. Oz., 10c; 1/4 lb., 20c; 1 lb., 60c, postpaid.



Purple Top White Globe Turnip.



Purple Top Strap Leaved Turnip.

Robertson's Golden Ball Tops small, roots medium size, round, smooth and deep yellow. Fine grained, flesh firm, crisp and sweet. Oz., 10c; ¼ lb., 20c; 1 lb., 70c, postpaid.

Yellow Aberdeen A late, medium sized, long keeping variety, roots round, yellow with a purple top, flesh tender. Oz., 10c; ½ lb., 20c; 1 lb., 60c, postpaid.

Purple Top Milan Extremely early and of splendid quality, medium size, flat and white, with bright purple top: strap leaved. Oz., 10c; 1/4 lb., 30c; 1 lb., \$1.00, postpaid.

Yellow Globe A round, smooth, light yellow variety of medium size and good quality. Oz., 10c; <sup>1</sup>/<sub>4</sub> lb., 20c; 1 lb., 70c, postpaid.

# Tobacco

Connecticut Seed Leaf A hardy cigar variety for home use. Oz., 40c; ¼ lb., \$1.25; 1 lb., \$4.00, postpaid.

Finest strain of imported seed. Oz. 60c; <sup>1</sup>/<sub>4</sub> lb., \$1.75; 1 lb., \$6.00, postpaid. Fine Havana

## Herbs

For early use, sow seed in hotbed or in open ground in May, in rows one foot apart. Cover very lightly and thin to six inches apart in the row. They should be cut on a dry day, just before they come into full blossom. Tie in bunches and keep where they will dry quickly.

ANISE. Used	l for flavoring. Oz.,	15c, postpaid.	SWEET MARJORAM. Used for seasoning. Oz., 20c postpaid.
CARAWAY. postpaid.	Seeds used for flav	voring. Oz., 15c,	
CORIANDER.	Seeds used for fla	woring. Oz., 10c,	SUMMER SAVORY. Leaves used for flavoring soups Oz., 20c, postpaid.

postpaid. DILL. Used for flavoring pickles. Oz., 15c, postpaid. | THYME. Used for seasoning. Oz., 40c, postpaid.

# **Quality Vegetable Plants**

For those who do not have the facilities or do not care to grow them, we carry a complete line of well grown plants of the best varieties. These plants are double rooted, sturdy, and of excellent quality. Greenhouse grown.

#### Cabbage

Prepaid, doz., 25c; not prepaid, 100

Doz., 20c, postpaid; not postpaid, 100

Peppers

Early Jersey Wakefield.

for \$1.25.

Bull Nose.

for \$2.00.

Ruby King.

Harris' Earliest.

Copenhagen Early Market. Danish Ballhead. Cauliflower

Snowball. Doz., 30c, postpaid; not postpaid, 100 for \$2.00.

#### Tomato

Dwarf Stone. Bonny Best. Chalk's Jewel. Red Head.

Doz., 20c, postpaid; not postpaid, 100 for \$1.25.

# **Texas Outdoor Grown Onion Plants**

For those who desire an early crop, either for table or for local marketing, these plants will prove most desirable, and the fact that they are inexpensive and call for minimum labor and trouble in produc-

call for minimum labor and trouble in producing the crop has created an ever-increasing demand for them. They may be set out at the same time you would plant sets or cabbage plants. Plant in rows about 15 inches apart and 3 to 4 inches in the row.

- Yellow Bermuda. The most popular of all the Bermuda varieties. It is the standard variety with the large commercial Bermuda Onion growers. It is a light straw colored Onion; makes the finest for pulling green or as matured Onions.
- Crystal White Wax. Unquestionably the most attractive Onion in the world. A pure white Bermuda Onion with a most beautiful waxy appearance which makes it sell on sight in all markets. Price, 500 for \$1.25; 1000 for \$2.25, postpaid.

# **Quality Flower Plants**

These plants are double rooted, grown in flats. We pack them well, letting some of the dirt adhere to the roots so that they will reach you in good condition.

All plants should be unpacked immediately after arrival, the roots placed in water for a few minutes. If you cannot set them out in their permanent locations, they should be separated and heeled in the soil in some sheltered place in the garden.

Aster. Queen of the Market and Salvia. Crego. Zinnia. Petunia. Snapdragon.

All of the above flower plants, per dozen, 30c, postpaid. For larger quantities, write for prices.

## Your Garden

This bountiful supply of fresh green vegetables can be yours if you will plant a garden. For special collection of seeds we refer you to page 21.







**GRAND RAPIDS GROWERS, Inc., Grand Rapids, Michigan** 



# Grass Seed for Lawns and Golf Courses

We specialize in the highest grade of grass seeds for lawns and golf courses. Nothing adds as much to the external attractiveness of a home as a beautiful, well kept lawn.

#### Sunny Lawn Seed

Contains Kentucky Blue Grass, Red Top, Perennial Rye Grass and White Clover. This mixture has made a host of friends by the results that are and have been obtained. We use only the very best of seeds obtainable, of lasting value and hardiness, mix them ourselves in the correct proportions to assure you of a beautiful and permanent lawn that will last for years. Price 50c per pound. **Shady Lawn Mixture** Contains Canadian Blue Grass, Red Top, Kentucky Blue Grass, and Fesque. This mixture is our own also, being mixed by ourselves especially for the shady spots. We use only the very best of seeds obtainable and as more care and attention is required we have used the hardier grasses, that will make a dense, thick growth in light soils and a very satisfactory lawn in shady places. Under trees and bare spots where there is a covering of moss or the soil seems to be out of condition, it is a sure sign of "sour soil" and lime must be used to correct this condition. Price 50c per pound.

# Making a Lawn and It's Care

If your soil is not a good garden soil, you must make it so. Save the good top soil and remove the balance to a depth of at least six inches, then apply two inches of clay if the soil is sandy, replace the top soil and enough more to bring up to grade line. Apply two inches of well-rotted stable manure (never use fresh manure) or if that is unobtainable, use pulverized poultry or sheep manure at the rate of 100 pounds to 3.000 square feet. To this should be added an equal amount of bone meal. This fertilizer thoroughly mixed with the top soil will make an ideal foundation for a lasting lawn.

Seeding. Procure the very best seed you can get. Do not take chances on cheap seed if you want good results. Our lawn mixtures contain only the very best re-cleaned seed and are made up of the proper proportion of the several grasses to make a permanent lawn. Sow one pound to 300 square feet. Cover with one-fourth inch of screened soil and roll or firm with the back of a spade or a board.

with the back of a spade or a board. Watering. Keep the surface of the new seeding moist but do not water to excess. Do not expect to see your lawn green in a week as Kentucky Blue Grass requires about 18 days to germinate, other grasses somewhat less. Some mixtures will come up in far less time, but you will generally find the bulk

Kentucky Blue Grass, June Grass manency. For lawns or pasture, it has no superior. Does well in any soil and stands the Summer heat remarkably well. As it takes some time to become established, it is usually sown in mixtures. 50c per lb. Canadian Blue Grass Kentucky Blue Grass. For shady spots it is advisable to use, as it is hardier and is better adapted to Michigan weather conditions. 50c per lb.

White Clover It is largely used in lawns and pastures. It makes a small, close, compact growth covering the ground like a carpet. Its blossoms are round, white and sweet scented, with numerous leaves of bright green color. It succeeds well in Michigan and looks better when sown in mixtures. 75c per lb. of such seed to be annual grasses which will not come up the second year. After the lawn is established, it is not necessary to water oftener than once a week, but then give it a thorough soaking. Frequent sprinkling tends to keep the roots near the surface and they will not have any reason to penetrate deep into the sub-soil for moisture, hence, when you have a period of hot, dry weather and cannot sprinkle, the grass plants will naturally suffer.

Mowing. As soon as the grass is long enough to cut, go over it with the mower, blades set about 1½ to 2 inches high. When the lawn is well established, they can be lowered to one inch. Never let the lawn grass go to seed as that will be too great a drain on the plants. The best time to seed is March and April or August and September.

Top dress in late Fall or early Spring with pure bone meal and pulverized poultry or sheep manure. Remember, a grass plant is a living thing and must have a strong constitution (good seed); proper living quarters (good soil); nourishment (proper fertilizer and moisture). and careful attention to its health (regular clipping, not too close; mulching to retain moisture by leaving the clippings occasionally if any thin spots occur).

Red Top A very hardy perennial grass, succeeding best on moist land. Valuable for lawn or pasture, and will produce large crops of good hay. 50c per lb.

Perennial Rye, (English). A desirable grass for lawn sod of medium fine grass and grows quickly after being cut. 25c per lb.

Creeping or Red Fescue Resists extreme drought, gravelly banks and exposed hills. 50c per lb.

Bent Grass One of the most valuable lawn grasses. Exceptionally good for golf courses, greens, etc., because of its short growth and deep green, fine-leaved foliage. \$1.00 per lb.

For the best in LAWN FERTILIZERS see page 29.

A GRASS SEEDER OF UNUSUAL MERIT FOR GOL<sup>T</sup> COURSES, ESTATES, ETC., IS LISTED ON PAGE 50. ASK US ABOUT IT.



# PLANTER'S GUIDE

In compiling this catalog we have given you cultural directions on our entire line of vegetable seeds listed with each variety, but as an additional source of information we give you the following guide arranged to help the gardener or farmer in the sowing of his seed or setting out the plants from February to October, in the latitude of Grand Rapids, Mich. For points north or south weather conditions will govern and should be taken into consideration.

	Seeds or roots re-		Distan	ice for plants t	o stand		
Kind of vegetable	quired for 100 ft.	One Acre	Rows apart		Distance	Depth of planting	Time of planting in the
Kind of Vegetuble	of drill		Horse culti- vation	Hand culti- vation	Plants apart in rows	planting	open ground
Asparagus, seed Asparagus, roots Beans, dwarf Beats, pole Bets Brussels Sprouts Cabbage, early	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3/4 bu 1/2 bu 5 or 6 lb3 2 ozs	30 to 36 in 3 to 5 ft 30 to 36 in 3 to 4 ft 28 to 36 in 30 to 36 in 30 to 36 in	12 to 24 in 18 to 24 in 3 to 4 ft 12 to 18 in 24 to 30 in	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	3 to 5 in 1 in 1 in 1 in 1/ <sub>2</sub> in	Early Spring Early Spring May to July June April to August Mar, and June Mar. and Apr. (Start in hotbed during
Cabbage, late Carrot Cauliflower Celery	1 oz	2 lbs 4 ozs	30 to 40 in 30 to 36 in 30 to 36 in 3 to 6 ft	18 to 24 in 24 to 30 in	2 in 18 in	1/2 in	Feb.) May and June April to June April to June May & June. (Start in hotbed or cold frame
Celery cabbage Corn, sweet Cucumber Eggplant	$\frac{1}{4}$ pt $\frac{1}{2}$ oz $\frac{1}{8}$ oz	$ \begin{array}{c} 6 & \text{qts.} & \dots \\ 2 & \text{lbs.} & \dots \\ \frac{1}{4} & \text{lb.} & \dots \end{array} $	30 to 36 in	20 to 36 in 4 to 6 ft 24 to 30 in	4 to every 3 ft. 4 every 3 ft 18 in	$ \begin{array}{c} 1 \text{ in. } \\ 1 \text{ in. } \\ \frac{1}{\sqrt{2}} \text{ in. } \\ \end{array} $	during Mar. or Apr.) Last of May May to July April to July Ist Apr. & May. (Start in hotbed during Mar.)
Endive Kale, or Borccole	1 oz 1 oz	2 lbs 1 lb	30 in 30 to 36 in	18 in 18 to 24 in	12 in 18 in	$\frac{1}{2}$ in $\frac{1}{2}$ in	April [July] Aug. to Sept. [March
Kohl-rabi Leek Muskmelon Watermelon Onion, seed Onion, sets	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	4 lbs 3 lbs 1 lb 3 lbs	6 to 8 ft 8 to 12 ft 24 to 36 in	14 to 20 in 12 to 18 in 6 to 8 ft 8 to 12 ft	4 in 6 in 4 every 4 ft. 4 every 6 ft. 2 in	$1\frac{1}{2}$ in	and April] March to May March to May April to June April to May April to May Autumn and Feb. to May
Parsley Parsnip Peas Pepper	1 oz	3 to 4 lbs 1 bu	24 to 36 in 30 to 36 in 3 to 4 ft 30 to 36 in	18 to 24 in 30 to 36 in		$\frac{1}{12}$ in $\frac{1}{12}$ in 1 in $\frac{1}{12}$ in	Sept. and early Spring April and May March to June May and June. (Start early plants in hot-
PumpkinRadishRadish Rhubarb, seci Rhubarb, roots Rutabaga Salsify Spinach Squash, Summer Squash, Winter Tomato Turnip	1 oz. 1/2 oz. 33 roots 1 oz. 1	1 lb 5 to 6 lbs 8 to 10 lbs. 2 to 3 lbs 1 lbs 1 l ozs	3 to 4 ft 7 to 10 ft 3 to 5 ft	12 to 18 in 30 to 36 in 3 to 5 ft 18 to 24 in 18 to 24 in 12 to 18 in 3 to 4 ft 7 to 10 ft 3 to 4 ft	3 ft 6 in 2 in 2 in 4 every 4 ft. 4 every 6 ft	$\frac{1}{2}$ to 1 in. 2 to 3 in. $\frac{1}{2}$ to 1 in. $\frac{1}{2}$ in. 1 in. 1 in. 1 in.	bed Feb. to April). May to July March to Sept Early Spring Autumn or early Spr'g May and June Early Spring Sept. or very e'ly Sp'g April to June May to July April and Aug

# **A Few Helpful Hints**

Decide early how much ground you will use and what you will plant. Plow or spade before the ground freezes, if you can. Fertilizer and manure will insure better crops. Don't cover the seed too deep. It will germinate more quickly if only a little soil is on the seed. See full cultural directions given for each variety of seeds in the foregoing pages.

Order your seeds early so that you can take advantage of the first signs of Spring as everything is planted early, except beans, wrinkled peas and vine crops. Cultivate often. Kill the weeds when they're small. A hoe is a better tool than a hose. Don't wait for bugs. Kill them or they'll ruin your crop. Get a good sprayer and use it. We handle a complete line of fertilizers and spray materials as well as sprayers and if you are in doubt what you should use, give us a chance to help you.

# FLOWER SEED DEPARTMENT

We are convinced that many of the failures with flower seeds are due to lack of proper conditions, and while it would be impossible in the space at our disposal in this catalog to give explicit directions for each and every variety which we offer, we feel sure that if the general directions given below are followed, success will be the rule.

Success With Flower Seeds For all flower seeds which should be started indoors, the best plan is to sow in earthenware seed pans or boxes (about two inches deep) which should be filled to the depth of an inch

inches deep) which should be filled to the depth of an inch with any rough material that will furnish perfect drainage. The upper inch should be nicely sifted soil, composed, if possible, of about one-third each of sand, leaf mould and light garden loam. Press firmly and evenly and water thoroughly the day before sowing. Sow the seeds thinly over the surface about one-eighth of an inch and pressing firmly. When the seedlings are large enough to handle, they should be transplanted into similarly prepared boxes an inch apart each way, or put into small pots and kept in same until time to plant out in the open ground. At all times they should have an abundance of air, otherwise the young seedlings are liable to "damp off." For most of the ordinary annual flowers, the simplest method is to sow directly out-of-doors when danger of frost

For most of the ordinary annual flowers, the simplest method is to sow directly out-of-doors when danger of frost is past in the space where they are intended to flower. The ground should be dug and raked fine on the surface, sowing the seeds evenly and thinly, covering not over four times their size, and firming the soil over them. Should they come up too thickly, as most of them are likely to do, thin out so that the plants will stand from 4 to 12 inches apart according to the variety.

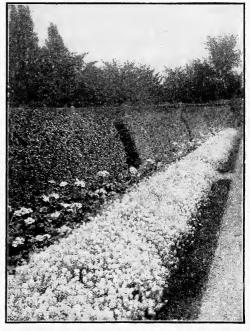
How to Sow Flower Seeds It will prove quite an advantage to mix all small seeds with sand or dry soil and scatter broadcast. This separates the seeds and is quite an advantage in thinning out or transplanting the young plants as those that remain are undisturbed. A common mistake in sowing flower seeds, is covering too deeply. The exception to this is the Sweet Pea, which is seldom planted deep enough. As a general rule, cover small seeds only to the depth of the thickness of the seeds; always press the earth after sowing all flower seeds, else there is danger of their drying up before the roots can get firm hold of the soil. Seeds of the hardier annuals may be sown where they are to grow; but as a rule, it is preferable to transplant, as the plants are generally stronger and stand the drought better. During very dry weather, and when the seedlings are first set out, they should be watered frequently.

The weeds should be kept down and the ground loosened often, so that the plants will receive the full benefit of the rains and dews, which they will not if the ground is allowed to become hard and baked. Annuals are those flowers which bloom and die the same year; grown from seed exclusively.

**Biennials** bloom and die the second year from the seeding time.

**Perennials** grow the plant the first year but do not flower until the second year and then bloom every year.

The letter (A) following variety indicates Annuals; (B) the Biennials; (P) the Perennials.



Alyssum, Little Gem.

#### Alyssum (SWEET ALYSSUM)

Very popular border flower. Dwarf habit, blooming until killed by frost. Fine for beds, borders and vases.

Little Gem (A). Erect, white. 1/4 oz., 20c; pkt., 10c.

Saxatile Compactum (P). Yellow. 1/1 oz., 25c; pkt., 10c.

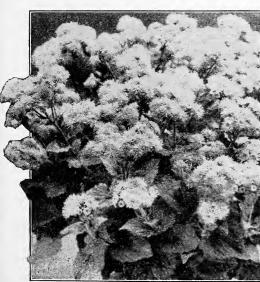
#### Ageratum (A)

(FLOSSFLOWER)

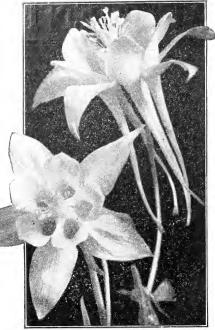
One of the best Summer blooming plants. They are rapid growers, early and constant bloomers.

Mexicanum Tall. 18 in. Beautiful soft lavender-blue, of free branching habit. 1/4 oz., 20c; pkt., 10c.

Imperial Dwarf Blue. 6 in. A charming variety of fine, compact growth, covered with heads of feathery flowers of a deep lavender color. <sup>1</sup>/<sub>4</sub> oz., 20c; pkt., 10c.



Imperial Dwarf Blue Ageratum,



Aquilegia-Columbine.

#### Antirrhinum (A)

(SNAPDRAGON)

For gorgeous coloring few flowers can match Snap-dragons. The flowers are of very large size, very fragrant and are produced on immense long spikes, which render them extremely well adapted for cut flowers.

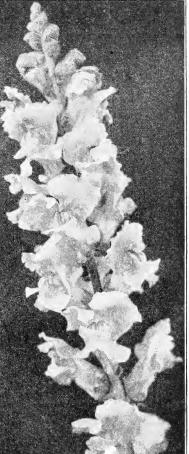
Tall Mixed. 1/4 oz., 25c; pkt., 10c.

Dwarf Mixed. <sup>1</sup>/<sub>4</sub> oz., 25c; pkt., 10c.

#### Aquilegia (P) (COLUMBINE)

This beautiful plant thrives in all kinds of soil; graceful foliage, flowers abundantly from early May until the last of June.

Single Mixed. <sup>1</sup>/<sub>4</sub> oz., 20c; pkt., 10c. Double Mixed. <sup>1</sup>/<sub>4</sub> oz., 20c; pkt., 10c.



Antirrhinum-Snapdragon.

BABY'S BREATH. See Gypsophila.

BACHELOR'S BUTTONS. See Centaurea.

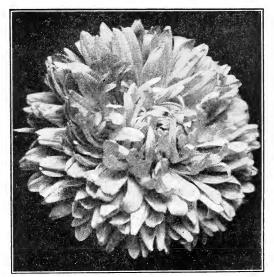


#### Asters (A)

- Giant Crego. The flowers are of immense size, usually measuring from four to five inches in diameter, and borne on stems 12 inches or more in length. Mixed, all colors. Oz., \$1.50; pkt., 10c. Giant Comet. This giant class is an improvement on the
- old and inferior Comet class, not only in bearing much
- old and inferior Comet class, not only in bearing much larger flowers, but the petals are longer and broader. Mixed, all colors. Oz., \$1.00; pkt., 10c. Queen of the Market. The best early Aster, usually in full bloom two weeks before most other sorts begin to blossom. Of graceful spreading habit. Mixed, all colors. Oz., \$1.00; pkt., 10c. American Beauty. Late flowering. Plants are of branch-ing habit, commencing to bloom in early September and lasting until destroyed by frost. Flowers are large, borne on long and stout stems from 18 to 24 inches.
- borne on long and stout stems from 18 to 24 inches, making them most desirable for cut flowers. Mixed colors, ¼ oz., 60c; pkt., 10c. Lavender Gem. The flowers are of a true lavender shade
- and the petals are gracefully curled and twisted and the blooms are borne on long, firm stems. Grows about 18 inches tall. <sup>1</sup>/<sub>4</sub> oz., 60c; pkt., 10c.

#### Balsam (A) (LADY SLIPPER)

Double Camellia-Flowered Mixed. An old and favorite garden flower, producing its gorgeous masses of beautiful colored double flowers in the greatest pro-fusion. 1½ to 2 feet. ½ oz., 25c; pkt., 10c.



Queen of the Market Aster.

### Bellis Perennis (P) (DOUBLE DAISY)

A favorite low growing spring flowering plant. Loves a shady place and rich soil. 6-8 in. Double choice mixture. <sup>1</sup>/<sub>4</sub> oz., 75c; pkt., 10c.

BLACK-EYED SUSAN. See Thunbergia.

BLANKET FLOWER. See Gaillardia.

BUTTERFLY FLOWER. See Schizanthus.

### Calendula (A) (POT MARIGOLD)

Orange King. The outer petals are slightly imbri-cated, while those in the center are curved like those of the peony. Color glowing orange. Oz., 30c; pkt., 10c.

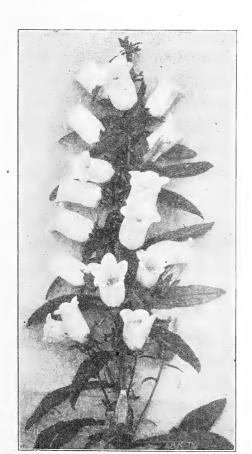
It has fine stems, immense double flower The Ball. of a brilliant glisteny orange. A great favorite on the Chicago cut flower market. Oz., \$2.00; pkt., 10c.

CALIFORNIA POPPY. See Eschscholtzia.

### Calliopsis (A)

#### (TICKSEED)

Very graceful border plants, supplying throughout Will thrive anywhere. 6 in. to 2 ft. Double mixed, all colors. <sup>1</sup>/<sub>4</sub> oz., 20c; pkt., 10c.



Campanula-Canterbury Bells.



Callionsis.

### Campanula (B)

#### (CANTERBURY BELLS)

This old-fashioned flower is a favorite with all, stately and showy and of the easiest growth. For best results seed should be sown every year. Single Mixed. ¼ oz., 20c; pkt., 10c.
Double Mixed. ¼ oz., 50c; pkt., 10c.
Calycanthema (Cup and Saucer). 2 ft. June to August. Mixed colors. ¼ oz., 50c; pkt., 10c.

### Candytuft (A)

This is one of the most prized garden annuals. Easily grown from seed and does not need trans-planting. Fine for cut flowers. Mixed. Oz., 25c; pkt., 10c.

### Cardinal Climber (A)

This is a very attractive, strong and rapid grower, attaining a height of 25 feet, with beautiful fern-like laciniated foliage and literally covered with a blaze of fiery cardinal-red flowers from mid-summer to frost. Pkt., 10c.

### Carnations (A)

Always in demand and not hard to grow, being hardy and free flowering. It is one of the most valuable of Summer flowers.

Marguerite. Double Mixed. ¼ oz., 50c; pkt., 10c. CASTOR BEAN. See Ricinus.

### Celosia (A)

### (COXCOMB)

Very popular annuals of easy culture, producing large, ornamental, comb-like heads like ruffled chenille. Prized for pots or Summer flower beds. Tall Coxcomb, Mixed. 18 to 24 inch. 1/4 oz., 40c; pkt., 10c.

Dwarf Cristata, Mixed. 1/4 oz., 40c; pkt., 10c.



Centaurea.

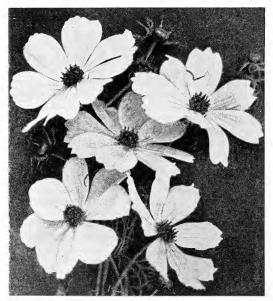
### Celosia-Con.

#### PLUMOSA or PLUMED VARIETIES

These stately plants are considered among the most ornamental, and should not be omitted in any garden. They generally form pyramidal bushes branching out in candelabra shape, and the numerous massive plumes which resemble ostrich feathers, wave gracefully above the foliage.

Plumed Celosia. Grows 2½ to 3 feet. Mixed all colors. ¼ oz., 25c; pkt., 10c.

Chinese Woolflower (Celosia Childsi). Plants grow 2 to 3 ft. high, the bloom starting early with a central head, round and globular, which often reaches the immense size of 2 ft. in circumference. Scores of branches are thrown out, each bearing a ball of scarlet wool. 1/4 oz., 50c; pkt., 10c.



Early Flowering Mammoth Cosmos.

### Centaurea (A)

A very popular annual that will always charm by its simple beauty.

Cyanus (Bachelor's Buttons). ¼ oz., 20c; pkt., 10c. Imperialis (Sweet Sultan). ¼ oz., 25c; pkt., 10c.

#### Chinese Lantern (P) (PHYSALIS FRANCHETTI)

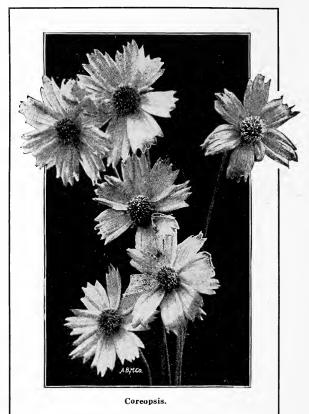
Flowers yellow with dark center. Produces balloonlike husks which turn bright red when ripe and resemble Chinese lanterns. <sup>1</sup>/<sub>4</sub> oz., 35c; pkt., 10c.

### Coleus (A)

### (FOLIAGE PLANTS)

Bedding plants, growing about 1 foot high. Their foliage is highly ornamental. Easy to raise from seed. Sow seed indoors. Choice Mixed. Pkt., 10c.

COLUMBINE. See Aquilegia.



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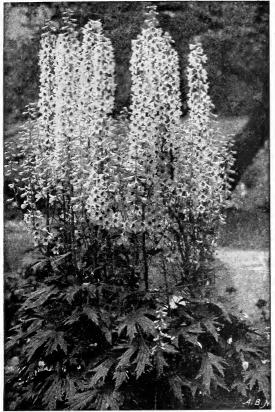
### Convolvulus (A) (MORNING GLORY)

Deservedly very popular as they are one of the most free flowering and rapid growing plants in cultivation; the beauty and delicacy of their brilliant flowers are unsurpassed. Soaking the seed in warm water for an hour or two hastens germination. Common, Mixed. Oz., 15c; pkt., 10c.

Japanese, Mixed. Oz., 25c; pkt., 10c.

### **Coreopsis** (P)

This is one of the finest of hardy plants, with large, showy, bright yellow flowers produced in the greatest abundance from June till frost. As cut flowers they stand near the head among hardy plants. Oz., 30c; pkt., 10c.



Delphinium-Larkspur.

### Cosmos (A)

This is one of the most showy and useful of our garden plants. Plants are very bushy, a compact mass. Flowers borne on long delicate stems and are similar to single dahlias. Foliage very finely cut. 4 to 6 ft.

**EARLY EXPRESS PINK.** A new variety and the earliest known, coming into bloom in from 45 to 50 days from the time the seed is sown. The plants grow about 2½ to 3 feet high and are covered with medium sized bright pink flowers. ¼ oz., 75c; pkt.. 10c.

Early Flowering Mammoth, Mixed. ¼ oz., 20c; pkt., 10c.

Giant Mixed. 1/4 oz., 20c; pkt., 10c.

COXCOMB. See Celosia.

### Cypress Vine (A)

For trailing upon a light ornamental trellis the Cypress Vine cannot be excelled. It has a profusion of scarlet or white star-shaped blossoms, and finely cut foliage. Mixed. <sup>1</sup>/<sub>4</sub> oz., 20c; pkt., 10c.

Daisy. Chrysanthemum Leucanthemum. See Shasta Daisy.

DOUBLE DAISY. See Bellis Perennis.

### Delphinium (P) (LARKSPUR)

Increasingly this fine flower is coming into favor. It is hardy, grows easily, has a long period of bloom and gives to the garden one of its stateliest plants, which bear tall spikes of exquisite blue flowers.

Formosum. 3 ft. Dark blue. ¼ oz., \$1.00; pkt., 10c. Perennial Mixed. ¼ oz., 75c; pkt., 10c.

#### Dianthus (A) (PINKS)

- Single. The flowers are extraordinarily large, of handsome form, and embrace the most beautiful colors, ranging from white to the most delicate pink and deep crimson. <sup>1</sup>/<sub>4</sub> oz., 25c; pkt., 10c.
- Double. Selection of the best double Pinks in cultivation. Flowers ranging in color through all the brightest and most brilliant shades. 1/4 oz., 25c; pkt., 10c.

### Digitalis (B)

(FOXGLOVE)

Bearing long spikes of beautifully colored flowers; if fine for planting in hardy borders or among shrubbery. Mixed. <sup>1</sup>/<sub>4</sub> oz., 30c; pkt., 10c.

### Eschscholtzia (A)

### (CALIFORNIA POPPY)

Especially valuable for growing in flower beds and masses. Sow where plants are to bloom. Bright, showy flowers and feathered foliage. Good for cut flowers.

California Golden. Large yellow flowers. Oz., 30c; pkt., 10c.

EVERLASTING FLOWERS. See Helichrysum and Globe Amaranth.

FLOSSFLOWER. See Ageratum.

FORGET-ME-NOT. See Myosotis.

FOUR-O'CLOCK. See Mirabilis.

FOXGLOVE. See Digitalis.

### Gaillardia

### (BLANKET FLOWER)

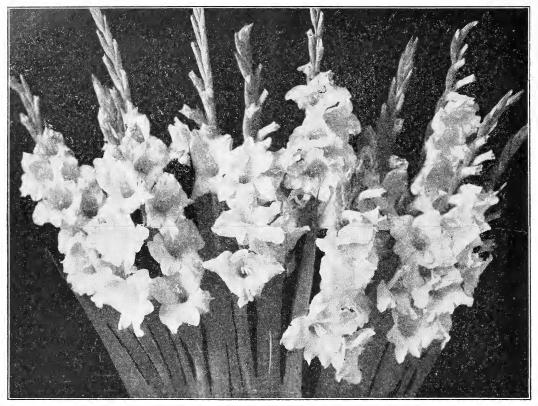
They will produce from early Spring until late Fall a continuous profusion of brilliantly colored flowers, red and yellow predominating. Of easy culture, sow where they are to remain.

Picta, Lorenziana. (A). Double flowers, mixed colors. Oz., 30c; pkt., 10c.

Grandiflora. (P). Constant bloomers. Mixed single. Oz., 50c; pkt., 10c.



Gaillardia.



Mrs. Dr. Norton Gladioli.

# **Choice Gladiolus Bulbs**

We give you here just a few varieties of Gladiolus Bulbs, but if you wish any that are not listed, give us the name and we will quote you price as our stock is large and we cannot give here the name and description of every variety.

- Alice Tiplady. Beautiful orange-saffron. Each, 10c; doz., 90c; per 100, \$6.00.
- Anna Eberius. Deep rhodamine purple, throat deeper purple; large flowers on tall spikes. Each, 10c; doz., \$1.00; per 100, \$7.00.
- Chateau Thierry. Bright scarlet-red with carmine blotch on yellow ground on lower petals; large, wide open flowers of great attraction. Each, 10c; doz., \$1.00; per 100, \$7.00.
- Crimson Glow. Very large deep scarlet-red, tall, strong spikes. One of the best reds. Each, 10c; doz., \$1.00; per 100, \$7.00.
- Evelyn Kirtland. Beautiful rose-pink, darker at the edges with brilliant blotches on lower petals. Each, 10c; doz., 90c; per 100, \$6.00.
- Glory of Kennemerland. Beautiful rose color with purple blotch on yellow ground, a lovely color combination. Each, 10c; doz., 90c; per 100, \$6.00.
- Halley. A very early salmon-pink, very popular. Each, 7c; doz., 75c; per 100, \$5.00.
- Herada. Large, pure mauve flowers, deeper in throat, a great favorite. Each, 10c; doz., \$1.00; per 100, \$7.00.
- Le Marechal Foch. The favorite pale pink variety. Flowers are extra large and very early. Each, 5c; doz., 60c; per 100, \$4.00.
- Mrs. Dr. Norton. Silvery white blooms with pink edges, throat cream-yellow dotted Tyrian rose. A beautiful color combination. Each, 10c; doz., \$1.00; per 100, \$7.00.
- Mrs. Francis King. Brilliant light red, large flowers on extra long spikes; very popular. Each, 5c; doz., 60c; per 100, \$4.00.

- Mrs. Frank Pendleton. Salmon-pink with rich carmine-red blotch in throat; a great favorite. Each, 10c; doz., 90c; per 100, \$6.00.
- Mrs. Watt. Beautiful clear wine-red. Each, 10c; doz., \$1.00; per 100, \$7.00.
- Panama. Beautiful deep pink, large flowers; one of the best clear pinks. Each, 7c; doz., 75c; per 100, \$5.00.
- Peace. Large white flowers with pale violet markings on the lower petals; tall, graceful spikes. Each, 7c; doz., 75c; per 100, \$5.00.
- Prince of Wales. Beautiful light orange flowers of good size. Very early. Each, 10c; doz., \$1.00; per 100, \$6.00.
- Rose Ash. Corinthian red shading to ashes of roses color on the outer edges; lower petals light yellow speckled with ruby. A very beautiful show variety. Each, 12c; doz., \$1.25; per 100, \$8.00.
- Schwaben. Clear canary-yellow shading to soft sulphur; small brownish red spot in throat. An old timer but still a favorite. Each, 7c; doz., 75c; per 100, \$5.00.
- War. Deep brilliant blood-red, large flowers. A great favorite among the large reds. Each, 10c; doz., \$1.00; per 100, \$7.00.
- Wilbrinck. Pale pink, lower petals have purplish stripes on a yellowish ground, very early. Each, 7c; doz., 75c; per 100, \$5.00.
- Standard Mixed. This mixture contains many beautiful varieties of different shades and markings. Each, 5c; doz., 60c; per 100, \$3.50.

### Gourds (A)

Interesting quick growing vines, excellent for covering arbors; ornamental foliage and fruits of odd design. Mixed, all varieties. Oz., 25c; pkt., 10c.

### Gypsophila (A)

### (BABY'S BREATH)

Graceful plants of fairy like growth. Large flowering, pure white of free easy growth. Much in demand for cutting and combining with other flowers for bouquets and vases. Several sowings should be made during the season to keep up the supply. Oz., 30c; ½ cz., 20c; pkt., 10c.

### Helianthus (A) (SUNFLOWER)

Of easiest culture. Suitable for backgrounds, screens, and to plant among shrubbery. It blooms from June till frost. 3 to 6 ft.

Double Chrysanthemum Flowered. Large golden yellow flowers, resembling a chrysanthemum. Oz., 30c; pkt., 10c.

### Helichrysum (A) (STRAWFLOWER)

An ornament to the garden when growing, and are everywhere prized for the Winter decoration of vases, and for durable bouquets. Flowers intended for drying should be gathered when partially unfolded and suspended with their heads downward in a cool place. Mixed, all colors. Oz., 50c; pkt., 10c.

### Heliotrope (A)

A favorite on account of its delightful fragrance and duration of bloom. Excellent for bedding. Graceful in habit of growth and valuable for cutting. 2 ft. Finest Mixture. ¼ oz., 50c; pkt., 10c.

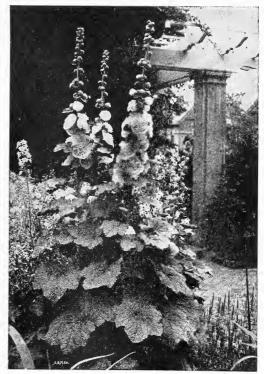
### Hibiscus (P)

#### (MARSHMALLOW)

Showy ornamental plants for mixed beds or shrubbery borders having large sized, beautifully colored flowers, blooms the first year if sown early. Sow seed ½ inch deep and transplant to 2 ft. apart. 3 ft. Mixed colors. ¼ oz., 50c; pkt., 10c.



Helichrysum-Strawflowers.



Double Hollyhocks.

### Hollyhocks (P)

Make a fine row in the garden and an excellent background to cover a high wall or fence. 6 to 8 ft.

Single Mixed. Large single flowers, exhibiting every shade known in Hollyhocks. ¼ oz., 25c; pkt., 10c.

Double Mixed. Double and semi-double. 1/4 oz., 40c; pkt., 10c.

### Job's Tears (A)

(COIX LACHRYMAE)

An ornamental grass growing 2 to 4 feet high, with curious seeds which may be used for beads. Oz., 10c; ¼ lb., 30c; 1 lb., \$1.00, postpaid.

LADY SLIPPER. See Balsam.

### Larkspur (A)

These handsome flowers are very effective in borders and planted amongst shrubs. The graceful spikes of blooms are much valued for vases. They continue long in bloom.

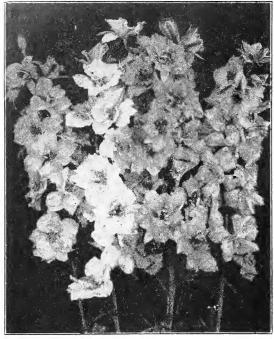
Double Mixed, all colors. Oz., 40c; pkt., 10c.

Giant Hyacinth-Flowered. Mixed. 3 ft. Derives its name from the striking resemblance of the flowers to the Double Hyacinth. Delicate colors. Oz., 50c; pkt., 10c.

### Lobelia (A)

#### (COMPACTA)

This charming class forms compact little bushes about six inches high and are fairly sheeted with bloom throughout the season. Very pretty and highly desirable for edgings, ribbon bedding and garden decoration as well as for pot culture. Mixed colors. ¼ oz., 30c; pkt., 10c.



Annual Larkspur.

### Lupinus (P)

Attractive in the garden but most desirable for cut flowers. Easily and quickly grown in rather poor soil. Do not transplant. Water well during hot weather. Mixed. Oz., 40c; pkt., 10c. MARSHMALLOW. See Hibiscus.

### Marigold (A) (TAGETES)

In late Summer when many bedding plants are past their prime, Marigolds afford a wealth of color that is simply invaluable. The African varieties produce large self-colored blossoms on tall plants; the French are smaller, but the colors and markings are very interesting, some of the varieties being elegantly striped and spotted.

Double Tall African. 1/4 oz., 20c; pkt., 10c.

Double Dwarf French. 1/4 oz., 20c; pkt., 10c.

### Mignonette (A)

No garden is complete without this fragrant plant of unassuming mien. One of the principal uses is for cutting purposes and combining in bouquets with other more pretentious blossoms without its delicate odor. Grows 6 to 12 inches high.

Machet. The best for all purposes. Of dwarf habit, with very large red flowers and handsome foliage.  $\frac{1}{4}$  oz., 15c; pkt., 10c.

### Mirabilis (A)

### (FOUR O'CLOCK)

This is another good old-fashioned flower of bushy habit, bearing hundreds of flowers during the season, of white, yellow, crimson and violet. Very charming with its glossy foliage very closely set and dotted all over in the afternoon with a multitude of fairy flowers.

Marvel of Peru. Mixed colors. 1/4 lb., 50c; oz., 20c; pkt., 10c.

MORNING GLORY. See Convolvulus.

MOURNING BRIDE. See Scabiosa.

### Myosotis (B)

#### (FORGET-ME-NOT)

They are considered among the best Spring flowers. They prefer moist, cool soil, and will bloom freely in Fall and early Spring.

Alpestris. Deep blue. 1/4 oz., 25c; pkt., 10c.

### Nasturtiums (A)

For ease of culture, duration of bloom, brilliancy of coloring and general excellence, nothing excels them. All they need is a moderately good soil, in a well-drained sunny position, and within a few weeks from the time they are sown until hard frost comes there is an endless profusion of blossoms. The varieties offered were selected from a number of sorts as being the best. Sow seed 2 inches deep and thin plants to 8 inches apart for dwarf varieties and 16 to 20 inches apart for tall or climbing varieties.

Dwarf, Mixed. Oz., 15c; pkt., 10c.

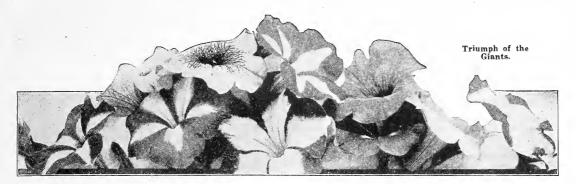
Tall, Mixed. Oz., 15c; pkt., 10c.

### **Pyrethrum** (P) (PAINTED DAISY)

One of the most valuable of our early Summer flowers. Charming colors and wonderful lasting properties as a cut flower. Flowers in May and June and frequently in August and September; in all shades of rose and pink. Height 1 to 2 feet. Roseum. Single mixed. ¼ oz., 75c; pkt., 10c.



Dwarf Mixed Nasturtiums.



# Petunias (A)

For freedom of bloom, variety of color and effectiveness these have no equal. If only a little care is bestowed upon them, they will produce their handsome, sweet-scented flowers in their delicate and gorgeous colors throughout the whole Summer and bloom profusely until killed by hard frosts. To facilitate sowing, the seed is mixed with sand or fine dry earth. Be sure the soil is finely pulverized for at least an inch on top of the ground. Scatter the mixture of seed and sand, barely pressing it into the moist soil with a small smooth board. It is an advantage to sow seed early in shallow boxes in the house, hotbed or cold frame, for window or porch boxes, vases and baskets, also for early flowering in the garden. Set the plants 12 to 18 inches apart. The Petunia loves a rich soil and thrives best in a sunny location. Pinch back freely. This causes the plants to branch out and spread, shading the ground, thereby helping to conserve the moisture. Keep the faded flowers clipped.

### **Single Giant Flowering Varieties**

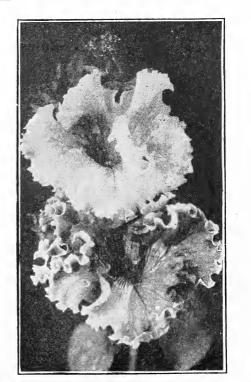
The flowers of this strain average five to seven inches across and are wonderful.

- Giants of California Mixed. The flowers are very large and the colors embrace every conceivable shade of crimson, white, violet, lavender, etc. Pkt., 200 seeds, 15c.
- Triumph of the Giants. The finest strain of single large-flowering Petunias; the flowers often measure seven inches across; some of its colors cannot be found in any other mixture and nearly all the flowers are veined in contrasting colors. Pkt., 250 seeds, 35c.

### **Double Large Flowering Varieties**

- Mixture of Double Petunias. This is a mixture of the best large flowering and fringed double Petunias. Seed is saved from plants grown in pots, carefully pollenized and will produce grand flowers. Of course, every one knows only a certain percentage of double flowers may be expected from seed, but our mixture will produce from 20 to 30 per cent of doubles, while the remainder will be choice, large single flowers. The weaker seedlings should be carefully saved, as those invariably produce the finest double flowers. Pkt., 200 seeds, 30c; 4 pkts., \$1.00.
- Best Mixture Large Flowering Single Petunias. This mixture is made by ourselves and includes, besides the Giant Ruffled, all the colors of the large flowering and fringed sorts, and the unsurpassed Superbissima varieties, with their delicately veined throats in various colors, and their truly mammoth flowers. We are positive no other Petunia mixture can produce flowers with as wide a range of colors as ours. Pkt., 300 seeds, 25c.

- Special Mixture of Dwarf Small Flowering Varieties includes all the varieties listed and many others and will be a revelation to those who plant a packet in furnishing an unending supply of flowers in a most bewildering combination of colors as long as the Summer lasts.  $\frac{1}{2}$  oz., 40c; pkt., 10c.
- Rosy Morn. The plants are bushy and compact, flowers of medium size, produced in great abundance the entire Summer and Fall; are of a most pleasing clear pink, contrasted by a broad white throat. A splendid sort for porch boxes, pots and beds. Oz., \$4.00; 1-8 oz., 75c; pkt., 25c.
- Royal Purple. Flowers of extraordinary size, averaging 3 to 4 inches across. Superb single flowering of a rich velvety color, so much in demand for hanging baskets, porch boxes, etc. Pkt. 150 seeds, 20c.



Giant Ruffled Petunias.

### Phlox

The annual Phloxes are dazzling in effect, particularly so when sown in masses or ribbon beds of contrasting colors. Few flowers are so easy to grow from seed, so pretty and compact in habit, so quick to bloom, or give such a brilliant display of color for so little cost or care. For pot culture and as an undergrowth for tall, bare-stemmed plants, they are also invaluable. The first sowing should be made as soon as the frost is out of the ground in Spring, later ones in May, either where the plants are to bloom, or in a seed-bed, as the Phlox transplant readily. In transplanting, set the taller kinds about a foot apart. Cutting away the old flowers makes the plants more bushy and compact, and lengthens their blooming time.

Phlox Drummondi. (A). Unsurpassed for variety of colors. Flowers are smaller than those of the large flowering varieties. Mixed. 1-8 oz., 25c; pkt., 10c.

Decussata. (P). Hardy herbaceous perennial and quite distinct from the Phlox Drummondi offered above, which is an annual. For best results seed should be sown in the Autumn. Finest Mixed. 1/4 oz., 75c; pkt., 10c.

PINKS. See Dianthus.

Oriental Poppies.

### Poppies

Should be sown as early in the Spring as possible, where they are to remain

as they will not stand transplanting. Sow very thinly, as they must not stand nearer than 5 or 6 inches apart if you wish best results.

- Ryburgh Hybrid. (A). The flowers are double and resemble a giant carnation, with flat petals overlapping like a double begonia. The colors embrace all shades of pink, salmon, orange, etc.; all self colors. Mixed. ½ oz., 40c; pkt., 10c.
- Double Poppies. (A). Special mixture as to variety as well as colors. Oz., 25c; pkt., 10c.
- Shirley. (A). These have beautiful satiny flowers of various colors, all with white centers, which makes the plants very attractive. Foliage is hairy and finely cut. Beautiful shades in delicate tints of rose, apricot, salmon-pink and blush to glowing crimson with a sprinkling of blues. Oz., 50c; pkt., 10c.
- Single Poppy. (A). Special mixture. Varied assortment and colors. Oz., 25c; pkt., 10c.
- Oriental Poppies, Hybrids, Choice Mixed. (P). These should be sown in early Spring in the open ground as soon as it is fit to work. The plants disappear during July and August appearing again as soon as the weather gets cool. It is well to mark the place with a stick so the roots will not be disturbed during this resting period. When the Fall growth starts they should be transplanted to their permanent flowering quarters. For permanent beds they are unequalled. Flowers of immense size, 6 inches and over, of many novel colors. ¼ oz., 40c; pkt., 10c.

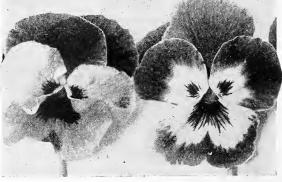


Phlox Drummondi.

### Pansies (B)

They like a cool, moist soil and protection from the wind as well as the noon-day sun. Seed should be sown in the house and transplanted when danger of frost is over. For large flowers, early in the Spring, the seed should be sown in August or September and the plants protected with a cold frame during the Winter. Seed may also be sown out-ofdoors in the Spring for late Summer and Fall flowers.

- Non Plus Ultra, Giant Mixture. This includes the most delightful variations in shades and markings, and is easily the most beautiful pansy grown. Very large in size, the blossoms measuring more than three inches across. A favorite with the pansy fancier.  $\frac{1}{3}$  oz., \$1.00;  $\frac{1}{4}$  oz., \$1.75; 1 oz., \$6.00.
- Radiolight. A new giant mixture of light colored Pansies, composed of clear self colors, containing also flowers with curled petals. The flowers are exceptionally large in size and are easily recognized as a superior mixture, bound to win favor with the Pansy fancier. ½ oz., \$1.00; ¼ oz., \$1.75; 1 oz., \$6.00.
- Giant Mixture. Flowers very large, and great diversity of colors. This mixture contains all the good ones. Oz., \$5.00; pkt., 10c.
- Good Mixture. Not so many colors as the Giant Mixture, but flowers large and good assortment of colors. Oz., \$2.00; pkt., 10c.



Pansies.

### Portulaca (A) (ROSE MOSS)

This plant will grow and bloom profusely in dry This plant will grow and bloom profusely in dry hot situations, where almost any other plant would soon die. Easily transplanted. In sowing mix the seed with dry sand to insure an even distribution. Sow in May when the ground is thorougaly warmed, and soon the loveliest of floral carpets will appear. Double Best Mixture. Oz., \$2.50; ½ oz., 50c; pkt., 10c. Single Mixed. ½ oz., 20c; pkt., 10c.

POT MARIGOLD. See Calendula.

#### Ricinus (A) (CASTOR BEAN)

Decorative plant with fern-like foliage, giving to Betofative plant with fenerice foldage, giving to the garden a magnificent sub-tropical effect; even a single plant forms a pyramid of leaves.
 Zanzibarensis. Leaves vary in color from light green to purplish red. ¼ lb., 50c; oz., 15c; pkt., 10c.



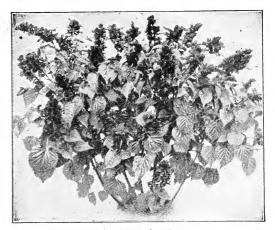
Portulaca-Rose Moss.

### Salpiglossis (A)

Undoubtedly one of the most attractive annuals and should be in every garden. The blossoms are tube shaped, much like a Petunia but rivaling the latter in the beautiful colors displayed. Nearly every flower is veined with a glint of gold, and it is the only fower to our knowledge possessing this odd charac-teristic. The flowers are large and last well in water. really better than when on the plants. Gloxiniaflora Mixed. ¼ oz., 40c; pkt., 10c.

### Salvia (A) (FLOWERING SAGE)

(FLOWERING SAGE) A hedge or bed of Salvias is a blaze of color during late Summer and Fall, bloom in spikes and continuing to bloom unt<sup>i</sup>l killed by hard frosts. Seed should be started indoors, sow about <sup>1</sup>/<sub>4</sub> inch deep; transplant when the soil has become well warmed, about 12 to 18 inches apart. Splendens. 2<sup>1</sup>/<sub>2</sub> ft. The well known variety, fiery scarlet. Oz., \$2.00; <sup>1</sup>/<sub>4</sub> oz., 60c; pkt., 10c. Fireball. 1<sup>1</sup>/<sub>2</sub> ft. The bushy plant is covered with a great number of flower spikes of the most fiery scarlet. The plants branch freely, the side shoots often producing 4 to 6 spikes. Oz., \$3.00; pkt., 15c.



Salvia-Flowering Sage.

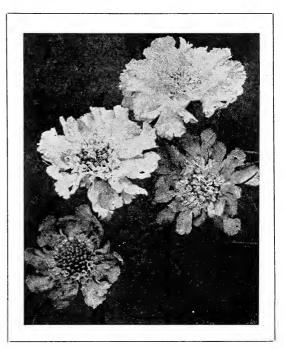
#### Scabiosa (A) (MOURNING BRIDE)

This is an old favorite and of late years has been greatly improved. The flowers are borne on long wiry stems in many beautiful colors. An excep-tional garden plant and indispensable for cutting. Sow out doors in May. Keep the seed pods clipped and the plants will bloom much longer. 12 to 18 inches.

Grandiflora Mixed. Our latest special mixture and we are sure the delicate soft colors will be ad-mired by all our friends. ¼ oz, 20c; pkt., 10c.

### Scarlet Runner (A)

A very rapid grower, bearing large sprays of bright scarlet pea-like flowers from early Summer to late Fall. Pkt., 10c.



Scabiosa.



Shasta Daisies.

### Shasta Daisy (P)

(CHRYSANTHEMUM LEUCANTHEMUM)

Grows very bushy, bearing all Summer a profusion of immense white flowers on long stems. 1/4 oz., 75c; pkt., 10c.

### SNAPDRAGONS. See Antirrhinum.

STRAWFLOWERS. See Helichrysum and Globe Amaranth.

### Stocks (A)

They last a long time in bloom, are beautiful, fragrant and satisfactory. May be sown in the open ground, or in the hotbed or cold frame, but if transplanted let this be done when the plants are small. Transplant 1 ft. apart.

- Ten Weeks Large Flowering. The favorite sort for bedding. Grows about 1 ft. high. Mixed, all colors. ¼ oz., 50c; pkt., 10c.
- Giant Perfection or Cut-and-Come-Again. Useful for outdoor bedding as well as for pots or cut flowers. They throw out numerous side branches, all bearing double fragrant flowers. Height 18 in. Mixed. <sup>1</sup>/<sub>4</sub> oz., \$1.00; pkt., 10c.
- SUNFLOWER. See Helianthus.

SWEET ALYSSUM. See Alyssum.

### Sweet William (P)

This sturdy, reliable old-fashioned favorite is still a source of delight in the garden of today. Seed may be sown at any time from Spring to midsummer. The charm of the great trusses of lovely color seems to be lost when it is planted as a mixture in masses. It is best if you give slight protection during the Winter. It likes warm, rich soil. 2 ft.

- Single, Finest Mixed. A very choice assortment of all the best single flowered varieties. <sup>1</sup>/<sub>4</sub> oz., 20c; pkt., 10c.
- Double Mixed. This mixture you will find of superior quality, containing all colors and shades. 1/4 oz., 40c; pkt., 10c.



Sweet William

### Schizanthus (A) (BUTTERFLY FLOWER)

Low growing, delicately branching and covered with butterfly-like flowers. Sow out-of-doors in May. Pinch back the main stem when 6 inches high. It seems to develop best in cool seasons, so make successive sowings through Spring and Summer. Supreme Mixture. All colors. <sup>1</sup>/<sub>4</sub> oz., 25c; pkt., 10c.



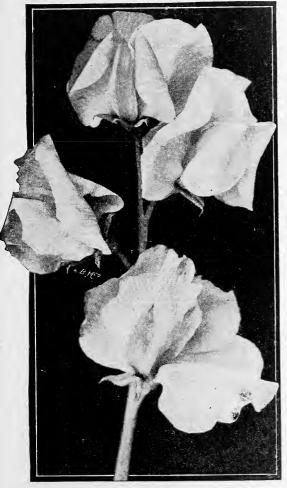
Stock or Gilliflower.

# **Beautiful Sweet Peas**

To grow Sweet Peas successfully it is necessary to plant early and give plenty of moisture. They should go in the ground as soon as the ground can be worked and should be planted six inches deep, being covered at first with only two inches of soil, the trench being filled as the plants grow. It is best to soak the seeds for several hours before they are planted. If this plan of planting early is followed, and if the Sweet Peas are kept mulched with peat moss, lawn clippings or else watered abundantly, they will certainly give a fine crop of lovely flowers held in admiration by every flower lover. The mixtures we give you below will give you color in profusion and well worth your consideration.

### Superb Spencer Mixed

A great many people prefer to grow Sweet Peas in the mixed colors. Our superb Spencer Mixture is made up of all the best varieties obtainable. The greatest care is taken to insure a well balanced range of colors and worthy of a place in any garden. Pkt., 10c; oz., 20c; ¼ lb., 50c; 1 lb., \$1.50, postpaid.



Mary Pickford Sweet Pea.

### Perennial Sweet Pea (LATHYRUS LATIFOLIUS)

Very decorative climbing vines of the pea family for growing on fences, trellis, etc., as floral screens and for cutting. Blooms all summer. Colors, pale pink, bright rosy crimson and large flowering white. All mixed. Oz., \$1.00; pkt., 10c.

### **Grandiflora** Mixed

This mixture is made up of the choicest sorts and while not as large as the Spencer type, bloom more profusely. This mixture is one of the best. Pkt., 10c; oz., 15c;  $\frac{1}{4}$  lb., 40c; 1 lb., \$1.00, postpaid.

We offer the following beautiful varieties of orchid flowering or Spencer Sweet Peas, in several distinct colors, and should be planted where a distinct color combination is to be brought out.

- Miss California. The color is a distinct shade of salmon-pink, and the effect is extremely beautiful, whether under natural or artificial light. The vines are of vigorous growth and bear profusely many four-flowered sprays of exquisitely waved or fluted form. The stems are long and stout. In the garden, Miss California is most attractive as the handsome flowers stand out from the heavy foliage, which forms a most attractive background. Oz., 40c; pkt., 10c.
- Mary Pickford. A beautiful dainty cream-pink with just the faintest suffusion of salmon, making the color combination hard to surpass. The flowers are perfectly formed with both standards and wings decidedly waved. Mary Pickford is a sturdy grower, producing an abundance of large four-flowered sprays on long, stout stems. This sweet pea was a large seller last season, and is a decided favorite both with the commercial grower and in the home garden. Oz., \$1.00; pkt., 10c.
- Youth. Clear waxy white, with a well defined clear pink edging. This is undoubtedly the best of all Picotee sweet peas. Enormous flowers which are wonderfully fragrant. Oz., 40c; pkt., 10c.
- Doreen. Bright rose-carmine. A huge flower much larger and brighter than any other carmine variety. Very popular with exhibitors on account of its large size. Bears a profusion of four blossom sprays. Oz., 40c; pkt., 10c.
- Campfire. This is the brightest, pure flame scarlet we have ever offered. It leads all other varieties in this class. The blossoms will stand the hottest sunshine without burning. Oz., 40c; pkt., 10c.
- Crimson King. Pure deep crimson, the most pronounced deep red of all sweet peas. The strong, straight stems, 16 to 18 inches long stand out well from the foliage and invariably carry more fourflowered sprays than three. Oz., 40c; pkt., 10c.
- Austin Frederick Improved. The finest pure lavender sweet pea yet introduced. The flowers are large, wonderfully fragrant. Oz., 40c; pkt., 10c.
- Hebe. Large flowers, old rose with pink shading, making a very wonderful color combination. The stems are long and the flowers stand out from the foliage in a pleasing array. Oz., 40c; pkt., 10c.
- Tangerine Improved. A salmon-orange sweet pea. deep colored, almost approaching the color of the tangerine orange. Fragrant. Oz., 40c; pkt., 10c.

TAGETES. See Marigold.



#### (A) Thunbergia

lata. A lovely trailing plant with large, showy flowers. It will trail over the ground, forming a dense mat of foliage and flowers. Colors range through all shades of yellow, orange, buff, to pure white, mostly with jet-black centers or eyes, which are very effective. Sometimes called "Black-eyed Susan." All colors mixed. <sup>1</sup>/<sub>4</sub> oz., 40c; pkt., 10c. Alata. TICKSEED. See Calliopsis.

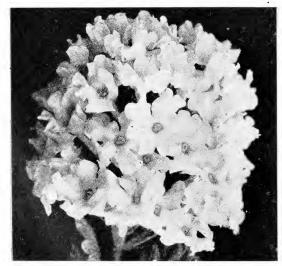
### Verbena (A)

One of our trustworthy garden companions. Of trailing habit. The foliage makes a perfect carpet and a fine background for the broad, flat flower heads of many brilliant colors. Sow in boxes in the house and transplant when the seedlings are an inch high, and set outside after danger of frost is past in a warm, sunny spot.

Mammoth Purple. <sup>1</sup>/<sub>4</sub> oz., 40c; pkt., 10c. Mammoth Mixed. Producing in handsome umbels flowers of large size in beautiful shades of white, rose, scarlet, blue and purple. <sup>1</sup>/<sub>4</sub> oz., 40c; pkt., 10c.

### Wild Cucumber (A) (ECHINOCYSTIS LOBATA)

This is the quickest growing climber in our list. It is thickly dotted over with pretty, white, fragrant flowers, followed by an abundance of ornamental and prickly seed pods. 1/4 lb., 75c; oz., 25c; pkt., 10c.



Verbena.

### Zinnias (A)

Splendid hardy annuals making a brilliant pro-fusion of color and succeeding well in any soil. They will retain their beauty for several weeks and bloom until frost.

- Lilliput Double, Mixed. 12 in. The plants form handsome little bushes and fairly bristle with tiny, short-stemmed, very double flowers hardly exceeding a daisy flower in size. They are pretty plants. <sup>1</sup>/<sub>4</sub> oz., 75c; pkt., 10c.
- Giant Double Quilled Achievement. The petals are partially tubular or quilled, in appearance resemb-ling the cactus dahlia. On the reverse side the petals are light or dark lilac. The plants are of strong, robust growth, and produce an abundance of very large double flowers often 5 inches in diameter. Choice Mixed. 1/4 oz., 75c; pkt., 10c.
- Colossal or Giant Flowered. The flowers are gi-gantic in size; thickly set with velvety petals. The plants are vigorous, branching freely and are fine for cutting. Mixed colors. <sup>1</sup>/<sub>4</sub> oz., 40c; pkt., 10c
- Giant Dahlia Flowered. In formation the broad petals are closely imbricated, sometimes seeming almost to be piled one upon the other. The flow-ers often measure 4 inches in depth and 6 to 8 inches in diameter. In general appearance the flow-ers compare with the Show Dahlias. Mixed colors. 1/4 oz., 75c; pkt., 10c.
- Double Mammoth Mixed. All the varieties listed here and others in one mixture. <sup>1</sup>/<sub>4</sub> oz., 40c; pkt., 10c.

### Vinca (A)

(PERIWINKLE)

Ornamental free-blooming plants and one of the most satisfactory flowering bedding plants we have. It is best to start the seed early indoors or in a hotbed, but they begin blooming in August from seed sown out-of-doors in May, or as soon as the ground is warm, continuing until frost; or they may be potted and kept in bloom through the Winter; a fine cut flower, every bud opening when placed in water. 2 feet.

Rosea. Rose, dark eye. 1/4 oz., 40c; pkt., 10c.

### Wallflower (P)

The Wallflower should win favor for outdoor bed-ding and pot culture. The oriental coloring is very effective. In the northern states it should be wintered in cold frames. Grows 2 ft.

Single Mixed. Oz., 25c; pkt., 10c.

# FIELD SEEDS

Big Yield of Grimm Alfalfa.

# Alfalfa

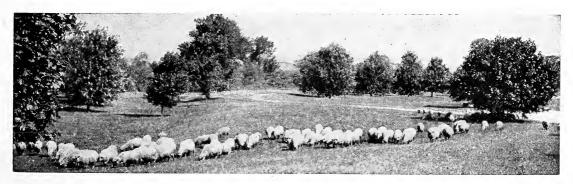
The acreage seeded to Alfalfa in Michigan is increas-ing every year. All of our seed is northern grown, therefore, it is best adapted to our climate. northern grown,

Every ton of Alfalfa hay removes from the soil eleven pounds of phosphoric acid, which cannot be replaced by plowing under cover crops or manure. And unless Acid Phosphate, ground phosphate rock, or bone meal is ap-plied, the soil soon becomes unbalanced, and will not produce good yields of grain. Even if the entire crop of either Alfalfa or Sweet Clover is plowed under, it only puts back the amount of phosphoric acid it has taken from the soil. At least two hundred (200) pounds of 16 per cent Acid Phosphate per acre should be sown with the seed, and the same amount should be applied as a top dressing every year thereafter so long as the field remains in Alfalfa.

**GRIMM ALFALFA** was brought to the United States by a Mr. Grimm, who brought with him from the old ry a few seeds of Alfalfa. He settled in Minnesota, and the seed country a few seeds of Alfalfa.

and its superiority is now so generally proven that it is rapidly superseding the Common Alfalfa. We have never known a failure in Michigan of true Grimm. Our Grimm Alfalfa, which is scarified seed, is grown by reputable organizations, and certified by the proper State officers in the state where grown, and guaranteed by them. Write for prices.

ALFALFA, Common Grown in Utah. The fields from which this seed was grown were carefully inspected. The seed is bright and plump, a beautiful golden color; free from dodder and all foul seeds. Scarified and carefully tested for germination. The high altitude of the mountain states insures hardiness. Write for prices.



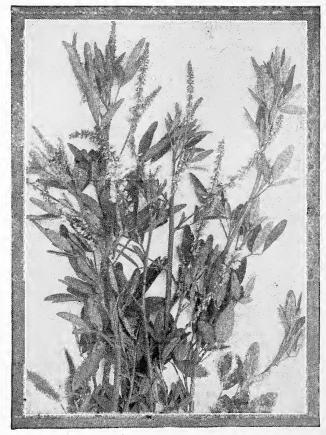
GRAND RAPIDS GROWERS, Inc., Grand Rapids, Michigan

~

**Medium Red or June Clover** By far the most important of all clovers for practical purposes. It is a perennial, and grows about two feet high; very valuable for plowing under to enrich the soil, adding humus and nitrogen. We handle only one grade—the best —as it is folly to buy anything else. Sow in Spring or Fall, eight to twelve pounds per acre, if used without other grasses.

Mammoth or Large Red Clover Mammoth Clover is quite distinct from Medium, growing to nearly twice its size; is coarser and a little later. It can be grown successfully on poorer soil than Medium Clover. It is used extensively for building up wornout land. Sow about eight to twelve pounds per acre when sown alone.

Alsike Clover A perennial and the most hardy of all clovers. It prefers damp, loamy soil. It is extremely leafy, making hay of a fine texture. Does not readily winterkill, and is valuable to sow with other clovers and grasses, as it increases the yield of hay. It is the best clover for moist soil. Sow either in Spring or Fall, about six pounds per acre, when sown alone.



Medium Red Clover.

> Right II White Blossom Sweet Clover.

White Blossom Sweet Clover Once considered a noxious weed; now nearly equal in value to alfalfa. White Sweet Clover is a biennial, and does not last so long as its cousin, alfalfa, but it has a greater flow of milk than even alfalfa, and as much feed. Cattle are less liable to bloat. Stock soon learn to like the hay, and even prefer it to alfalfa. Write for prices.

### Timothy

The most important of all grasses for hay, and is adapted to a wider range of conditions than any other variety of grass. It is the hardiest of all grasses and excels in feeding value. Sow early in the Spring or Fall, 10 to 12 pounds per acre if sown alone; less if mixed with other grasses.

### Sudan Grass

A tall annual grass reaching the height of 7 to 9 feet when planted in rows and cultivated, and 4 to 5 feet when sown broadcast. The hay is greatly relished by all stock, and has exceptionally high feeding value. Is adapted to most soils.

### Orchard Grass

This grass grows well in the shade, is rather rank in growth and a stooling variety. Stands the drought remarkably well. Valuable for pasture or orchard. Does well in wet or poor ground and produces large crops of hay.

### Millet

A few acres of millet will yield half again as much hay per acre as either clover or timothy, besides it has a greater feeding value and any stock raiser or dairy farmer would be well repaid. When Spring weather is unfavorable, so that other crops fail, or the season is late and wet so that corn will not mature, millet is a sure crop. Millet should be sowed from May to August.

### German or Golden Millet

This grows very rank and is one of the best varieties for hay and fodder. On good, rich soil it will make a growth of 4 or 5 feet high. While the hay may seem coarse, nevertheless, it is quite tender if it is cut when in full bloom and even hogs will eat the cured hay quite greedily. A yield of 5 tons per acre is nothing unusual. Sow 3 pecks per acre. German Millet will withstand dry weather remarkably well.

### Hungarian Millet

This variety is preferred by some to Golden Millet as it is about a week earlier. Does not grow as large but the hay is more desirable because it is not so coarse. Very nourishing and a wonderful milk producer. A good variety for moist soils.

### Soy Beans

When clovers fail it is necessary to have an emergency hay crop which will make hay the same season it is planted. For this purpose Soy Beans are better than the Millet. Soy Beans should be planted in May or June. They withstand drought remarkably well. For hay, silage or green manure crops, plant 1 bushel to an acre if drilled, if planted with a corn planter ½ bushel is sufficient.

### Ito San

For Michigan this is one of the best varieties as it matures in 100 days. The plant stands erect, growing about 2 to  $2\frac{1}{2}$  feet high and is a good yielder. The beans are medium sized and yellow in color. These are excellent as a catch crop on account of their early ripening.

### Manchu

Another early maturing variety that has become popular in all northern sections. It matures at about the same time as the Ito San and is of a stout, bushy growth, standing erect. A large seed yielder and excellent for an early hay and forage crop. This variety is recommended by the Michigan Experiment Station.

### Sand Vetch

Sand or Hairy Vetch shares with Sweet Clover the honor of giving the best results in restoring fertility to worn-out land or making poor, sandy soils productive. Sand Vetch has no equal as a cover crop. It can be sown in the cornfield just after the last cultivation, and it will make a mass of green stalks and leaves to plow under about the middle of May; or it may be sown after harvesting oats and plowed for corn the next Spring. Hay made from Sand Vetch is about three per cent higher in protein than Alfalfa hav, and is more eagerly eaten by stock. When sown with oats or any Spring grain, it will come on after crop is harvested and make splendid Fall pasture, and can be plowed under the next Spring for corn or potatoes. Sow from 30 to 40 pounds per acre.

### **Dwarf Essex Rape**

Under favorable conditions Dwarf Essex Rape is ready for pasture in six weeks from the time of sowing. One acre of good rape will carry a flock of a dozen sheep for two months. Recent experiments have shown rape to be the means of producing pork at the lowest cost, even less than alfalfa. Rape is also the forage that can be sown with the least effort. Seeded in corn at the last cultivation to be hogged own, furnishes one of the greatest money-making methods known to the progressive farmer today. Sow rape in corn at the rate of 4 lbs. per acre. When the corn is harvested and cut, then turn the pigs into the field in the Fall. The cost of harvesting is nothing as it is done by the pigs and the pigs put on firm flesh when on rape pasture.

### Canadian Field Peas

Valuable for northern climates for cattle feed and when sown with oats make an excellent hog feed. Should be sown early in April, two bushels to an acre. If sown with oats for hay and fodder sow  $1\frac{1}{2}$  to 2 bushels per acre.

### Rosen Rye

This is the best variety of Winter rye now being grown. The grain is large, plump and of a light color. Straw is strong and stands up well. The heads are long and well filled; an unusually heavy yielder. Sow 1½ bushels per acre.

### Silverhull Buckwheat

A standard variety, largely grown, and gives excellent satisfaction. Unsurpassed as a catch crop when a late season has made it impossible to follow out your first plans or when other crops fail. Buckwheat is a valuable crop for those parts of the farm which always seem to be left unplanted at the close of the season. It is generally sown in July and will fill up the vacant plots at a time when all other planting is past. Can be sown after a crop of Winter Wheat or Rye and make a second crop. Use one-half to three-quarters bushel of seed to an acre.

### **Certified Wolverine Oats**

Michigan grown. These oats are medium early, strong and vigorous growers, heavy yielders. The head is full and loose with the seeds evenly distributed around the stem. The straw is of medium height and stiff enough so that they seldom lodge. The grain is large, white, rather blunt and very plump. This variety is grown more extensively in Michigan than anv other because it has given such uniformly good yields.

### Mammoth Russian Sunflower

A very profitable and important crop. The seed is highly valued by farmers and poultry breeders. The hens will lay more eggs and fatten on it. Single heads will measure 15 to 20 inches in diameter and contain a lot of seed, which can be raised cheaper than corn. Many are now growing Sunflower for ensilage. Sow 3 lbs. per acre.



Leaming Fodder Corn.

### Fodder and Ensilage Corn

Dry Fodder Corn is the most satisfactory substitute for hay. It nearly if not quite equals in feed-ing value timothy and clover. All stock eat it greedily and thrive on it. It yields from three to five tons of dry fodder per acre, which is a much larger yield than timothy and clover will give, making a far more profitable forage crop to grow. It can be sown as late as July first, with a reasonable assurance of a fair growth of fodder, making it an ideal catch crop, as the work can be done after haying rush is over. It can be sown at the usual corn-planting time and by sowing rape between the rows after the last cultivation, it makes splendid Summer pasture for hogs or sheep.

### Leaming Fodder Corn

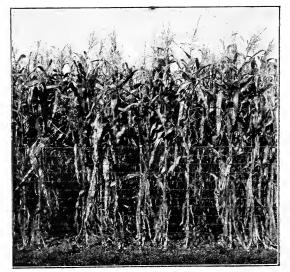
This variety is preferred by most dairymen for filling silos, for the reason that the corn matures the large ears (in any ordinary season it will ripen), and gives more grain in the ensilage. Stalks very large and leafy, and grows an immense amount of forage to the acre. It requires from one peck to one-half bushel of seed per acre, drilled in rows one way.

### **Red Cob Ensilage**

A gigantic Southern white corn, producing im-mensely large ears, rarely maturing in this latitude. The stalks grow from 12 to 15 feet in height, with long, broad leaves from the ground to the tassel. Stalks very thick at the butt, juicy, tender and as sweet as sugar corn; and all stock eat it with relish. Many dairymen prefer it for the silo, for the reason that it produces such an enormous amount of silage (from 15 to 25 tons nor eare). that it produces such an enormous amount of silage (from 15 to 25 tons per acre). It is especially valu-able for the dry fodder when cut and kept in the shock until fed. It will produce a good crop of forage, even when sown as late as July. Red Cob Ensilage is one of the best crops to raise for the purpose of killing quack grass or other foul weeds when the land is badly infested. For killing quack grass plow the sod late in the Fall, which, with the freezing of the roots will greatly injure the plants; cultivate with a spring-tooth harrow every week in April and May. Plant Red Cob ensilage in drills, using one bushel of seed per acre, smothering the quack and other weeds. For silos or fodder, sow from one-half to one bushel per acre.

### Eureka Ensilage Corn

Will produce more tons of silo corn per acre than even Red Cob Ensilage corn. Stalks will grow 12 to 15 feet in height, with broad leaves from the ground up. Each stalk will bear from one to three long ears. Very rapid grower and can either be planted in hills or in drill rows. Write for prices.



Ensilage Corn. Ten feet tall.

# **Farm Fertilizers**



### V. C. Fertilizers

V. C. Fertilizers are well known, well advertised and well recommended, and as all soil requires enough available plant food to produce a maximum crop, we give you below a list of the V. C. Fertilizers which will give an abundance of available plant food and meet your needs as well as give you a bumper crop.

	Nitrogen	Available Phos. Ac	Actual Potash
V-C	Phospho Tobacco 16% (300 lbs. To- bacco Stems per ton)	16	
V-C	Potash Phospho Tobacco 14-4 (300		
	lbs. Tobacco Stems per ton)	<b>14</b>	4
V-C	Ammoniated Phospho Tobacco 2-		
	12-2 (300 lbs. Tobacco Stems per		_
	ton) 2	12	$^{2}$
	Superphosphate 16%	16	
V-C		20	
V-C		24	
v-c	Muck Special 0	8	32
V-C	Plow Brand 0	10	10
V-C	Potash Formula 0	<b>14</b>	6
V-C	Phosphate & Potash0	20	20
V-C	Favorite 2	8	10
V-C	Tip Top 3	9	18
*V-C	Owl Brand 2	12	$^{2}$
*V-C	Farmer's Friend 2	12	6
*V-C	Indian Brand 2	16	$\frac{2}{6}$
	Big Winner 2	16	
*V-C	Big Potato & Truck 3	12	4
*V-C	Truck Hustler 4	10	6
	Super 24 Fertilizer 4	16	4
		Total	
		Phos.	
	E GOODS:	Arid	
V-C	Pure Bone Meal (steamed) 1	29	. 0
Ana	alysis marked (*) especially recommend Agricultural Department. Write us t	ded by	tne
state	Agricultural Department. Write us	for pri	ces.
MUI	RIATE OF POTASH. The best form of	Potash	for

MURIATE OF POTASH. The best form of Potash for fruit and muck végetable crops. All root crops draw heavily on the soil for Potash, especially potatoes and onions. Most muck soils are lacking in Potash, and celery will grow a much firmer stalk of far better quality when either a high grade fertilizer, high in Potash, or Muriate of Potash is applied in liberal quantities. CALCIUM NITRATE. BASE (Nitrate of Line)

**CALCUM NITRATE, BASF** (Nitrate of Lime). Guaranteed 15% Nitrogen, equivalent to 18.2% Ammonia; Nitrate and Lime, two very essential elements combined in one. Highly soluble and quickly available. NITRATE OF SODA. In its commercial form contains about  $15\frac{1}{2}\%$  of Nitrogen, equal to about  $19\frac{1}{2}\%$  of Ammonia. As the source of Nitrogen or Ammonia, in home mixed fertilizers Nitrate of Soda is the most desirable, particularly for all quick-growing crops, and when early maturity is desired, and when inclement weather is at hand, or frost, Nitrate of Soda will give maturity before the frost really kills,

SULPHATE OF AMMONIA. Used largely in orchards for practically all kinds of fruit; especially valuable for melons and tomatoes, which thrive better in a slightly acid soil. A form of nitrogen which is coming into general use with fruit men and truck growers. It will take the place of Nitrate of Soda to a certain extent, in so far that it is not so quick acting.

LIME. Pulverized Agricultural Limestone is not a fertilizer as it is commonly thought, but is a soil sweetener, and every farmer can insure the constant fertility of his soil by using a little care and "feeding" the soil regularly with the elements needed. One of the most common ailments for lack of fertility in farm land is "ACID SOIL", and it is to correct this condition, to "sweeten" or neutralize acid soil that Pulverized Limestone is used; it has brought bumper crops, money-making crops, on farms that otherwise would be practically worthless. Run down fields where you have been unable to grow alfalfa or clover and where moss, sour grass and thistles thrive, need pulverized limestone.

**PULVERIZED HEN MANURE.** Contains double the plant food value of Pulverized Sheep Manure and is sold as cheaply. Han Manure is collected mainly from unloading cars in which poultry have been shipped and is dried and finely ground so that it can be evenly applied and not burn vegetation.

PULVERIZED SHEEP MANURE. This is collected from the Stock Yards, heated to kill weed seeds, finely ground, and forms an excellent fertilizer for lawns, golf courses, garden plots, etc.

SHREDDED CATTLE MANURE. Collected from the stock yards and is finely ground, containing a similar amount of plant food as Pulverized Sheep Manure and is exceedingly good for the humus that it adds to the soil.

good for the humus that it adds to the soil. **OLD GARDENER.** This is a properly balanced preparation in which all the elements necessary for plant growth are made available. It contains as high a percentage of nitrogen as can be safely carried in a general-purpose mixture for garden and greenhouse use. It supplies in abundance the phosphates and the potash which are indispensable to halthy plant growth. It also has a physical effect in making stiff soils lighter and more fluffy. Old Gardener is offered as a reliable combination of the materials that have been found best for actual yield, and not merely as conforming to a chemical specification.

MANGANESE SULPHATE. Research shows that manganese is essential in the manufacture of the green color in plants, by the aid of which the most important processes of plant growth operate and is lacking in most soils. Manganese Sulphate is added to mineral fertilizers to supplement this plant food element and has been found very beneficial in growing crops.

We handle large quantities of these fertilizers every year, have a large stock at all times, and ask that we be given a chance to quote you. Write us for prices. FOR GARDEN AND LAWN FERTILIZERS WE WILL REFER YOU TO PAGE 29.

### **Glazing Material and** Putty

ARCO CAULKITE. (Formerly Arco 834.) Black, a plastic material for glazing and caulking, especially desirable for factory and greenhouse work. Per gallon, \$1.75.

lon, \$1.75. ARCO 835. Natural white. A plastic glazing ma-terial applied with an Arco glazing gun for glazing and bedding skylight or upright glass in metal or wood sash. Per gallon, \$2.35. GARLANITE. White. This famous glazing com-pound remains soft and elastic under all conditions as it is manufactured with special process treated vectorable ails. It is the proven answer to your glaz-

vegetable oils. It is the proven answer to your glaz-ing problems. Per gallon, S2.75. OLD ENGLISH. Is well known and recommended for bedding glass in sash or for filling cracks or seams

This putty is used in machine or bulb and makes a solid bed, impervious to moisture and holds glass in its place, and will stop any crevice or fault. When once set on dry wood it does not heave. Per gallon, \$2.50.

**GLAZING GUN.** Improved style. The barrel is made from heavy gauge seamless steel tubing. Is light in weight (2 lbs.), strong and durable. Will last It saves time and energy. Price, \$5.00 a lifetime. each.

PUTTY BULBS. Each, \$1.25.

### Fruit Packages

We carry a large stock of fruit packages at all times and are in position to quote you the lowest market prices.

Tub Bushels, Bushels, Half Bushels, Berry Boxes, Crates and Fillers, Picking Baskets, Attractive Road-side Baskets of all kinds.

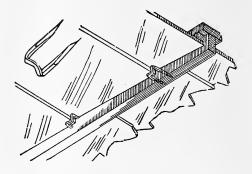
Give us an opportunity to quote you on a dozen or carload.

### **Truscon Greenhouse Glazing Putty**

A superior glazing compound of pure linseed oil base for greenhouse glazing. Natural in color. 1 gal. cans, \$2.25, not postpaid.

Black. A plastic material for glazing and caulking. Per gallon, \$1.75, not postpaid.

### **Greenhouse Glazing Points**



Every greenhouse man has occasional use for greenhouse glazing points to use in his repair work, as well as new construction.

Van Reyper points tinned, 9/16 inch size, per carton, 75c.

Van Reyper points tinned, 5/8 inch size, per carton, 75c.

Zinc points, headed 6/8 inch size, per carton, 50c. ABOVE PRICES ARE NOT PREPAID AND ARE SUBJECT TO MARKET CHANGES.

### **Grass Seeders**



Fastest of all Grass Seeders-Sows Evenly and Accurately

Save seed but increase your yield by this uniform seeding method. Does not throw seed in the air where wind can blow it into bunches and leave barren spots in your fields. The flow of seed is positively controlled and does not depend on the operator—the only hand seeder with this advantage. The most substantial hand seeder built. Has a steel wheel and chain feed—streng and durable. Will last a lifetime. Nearly a half million in use. Quickly adjusted for the quantity of seed desired.

Easily sows 40 acres a day and no seed wasted. Sows close to the ground where wind does not affect it. Actually pays for itself by saving seed and time. The best seeder for sowing Alfalfa, Clover, Timothy, Hungarian, Millet. Flax, Red Top, Orchard Grass, clean Blue Grass, all kinds of grass seeds.

No. 11 S'rgle Hopper Seeder. Sows all small solid seeds like Clover, Timothy and Alfalfa. Shipping weight, 50 lbs.

Price, with 14 ft.	\$14.00
	•
Price, with 16 ft.	\$15.00
nopper	φ10.00

No. 12 Double Hopper Seeder. Sows all the seeds the No. 11 will and also has an extra seeding range for all chaffy seeds like Red Top, Orchard Grass and clean Blue Grass seed.

Thompson's No. 106 Special



Particularly adapted for golf grounds, cemeteries, parks, country estates, or wherever uniform growth of grass is desired. Especially designed for this purpose, having a wide, deep hopper which is easily filled and carried beneath the handles so it discharges close to the ground so wind does not affect sowing of even the lightest seeds.

Sows all solid or recleaned seeds such as Red Top, Orchard Grass, clean Blue Grass, Rye Grass and all special lawn and turf seeds. It broadcasts 10 feet wide as fast as a man will walk. Quickly adjusted for any quantities desired. The positive, uniform broadcast prevents bunching and consequently loss of seed and uneven turf **A** full line of quality grass seed and uneven turf. A full line of quality grass seeds will be found on page 28.

> Price, No. 106 **\$20.00** Special..... Shipping weight, 60 lbs.

50

# **INSECTICIDES**

ARSENATE OF LEAD. (Dry). For dusting and spraying. Comes in 1 lb. boxes, 4 lb., bags, and 24 lh. cartons.

"BLACK LEAF 40." A concentrated solution of Nicotine Sulphate containing 40% Nicotine for spraying also used as a lice control in the hen house by simply painting the roosts. 1 oz. bottle, 35c; ½ lb. tin, \$1.25; 2 lb, tin, \$3.25; 10 lb. tin, \$11.85.

BORDEAUX MIXTURE. (Dry). The best fungicide for grapes and shrubbery. Packed in 4 lb. bags.

CALCIUM ARSENATE. (Dry). Packed in 4 lb. bags.

**COPPER SULPHATE.** (Blue Vitriol). Crystals, used in making Bordeau Mixture and especially by celery growers in the control of celery blight. Packed in full barrels of 450 pounds.

CORROSIVE SUBLIMATE. (Dry). The old re-liable treatment for potatoes. Comes packed in 1 lb. hoxes

CYANOGAS A-DUST. It's the gas that kills them. Garden ants, rats, mice, moles, woodchucks and ro-dents of all kinds. Very easily applied, with a spoon or duster. 1 lb., can, 75c. The Cyanogas Duster is listed on page 54.

CYANOGAS G-FUMIGANT for greenhouse fumiga-tion. Simply scatter evenly on the walks, and close the houses. 1 lb. can, 75c; 5 lb. can, \$3.00; 25 lb. can, \$10.00.

DUSTING SULPHER. A dusting fumigant for the control of mildew.

FISH-OIL SOAP. A standard wash for trees and plants where insects and eggs affect the bark. 10 lb. can, \$2.25.

LIME AND SULPHER SOLUTION. The old reliable spray for San Jose Scale. Comes in barrel lots only.

DRY LIME-SULFUR. Packed in 1 lb. pkgs., 5 lb., 121/2 lb. bags and 200 lb. drums.

MULSOID-SULFUR. The finest Summer sulfur spray for peaches. 95% sulfur. Packed in 4-lb. bags. sulfur

### SHEPS PLANT SPRAY



This NON-POISONOUS spray gives positive protection against both sucking and chewing insect pests, including Aphids, Thrips, Green Flies, White Flies, Mealy Bugs, Worms, Caterpillars and others. Harmless to humane birds animals and Bugs, worms, Caterpliars and others, Harmless to humans, birds, animals and pets. Will not injure the most delicate plants. Benefits soil and foliage. Abso-lutely the easiest spray to mix—no soapsud solution, perfect emulsion—20 seconds from bottle to plant.

#### PRICES POSTPAID

2-oz. Bottle	(make	s 4	gals	Spray	Sol.)	)\$	.35
8-oz. Bottle	( "	16	- "		"	)	.75
Pint Bottle	("	32	"	<b>**</b> -		Ś	1.25
Ouart Can	( "	64	"	**	**	5	2.00
Gallon Can	( "	256	"	**		5	6.35
5-Gal. Can		280	"	"	"	)	30.00

**Bulk Prices Ouoted On Request** 

"NICOFUME" LIQUID. Nicotine Solution for fum-igating or spraying. A highly refined solution of "free" Nicotine, containing 40 per cent of Nicotine. 1/4 lb. tin, 75c; 1 lb. tin, \$2.00; 4 lb. tin, \$6.25; 8 lb. tin, \$11.50.

NICOFUME TOBACCO POWDER. For fumigating greenhouses. 1-lb. tin, \$1.00; 5-lb. tin, \$3.75; 10-lb. tin, \$6.85.

PARIS GREEN. A poisonous insecticide for chewing insects. 1/4 lb., 20c; 1 lb., 60c; 5 lbs., \$2.50.

DENDROL. Standard Oil Co. (Indiana). Dormant Spray Oil. An improved Miscible Oil for domant and delayed dormant spraying of fruit and shade trees and shrubbery, which in concentrated form as delivered for use is a transparent, perfectly homo-geneous oil of clear reddish color. Upon mixture with wroth it new readily discovery and forme a willow water it very readily disperses and forms a milky white emulsion. It is specially designed to embody properties essential for use as a spray (insecticide) for the control of those insects susceptible to the ac tion of a material of this class. The cost is lowered by virtue of increased effectiveness. Dendrol is recommended in the control of San Jose, Oyster Shell, and Scurfy Scale, Apple Aphids (plant lice), Woolly Apple Aphids, Pear Psylla, Red Mite (spider), Twit Track and Ballar and more the increte which Fruit Tree Leaf Roller, and many other insects which invade fruit, shade trees and shrubbery. PRICES ON APPLICATION.

SLUG SHOT (Hammond's). An old reliable insecti-cide for the control of potato bugs, as well as those on tomatoes, and eggplant, cabbage lice and worms. Guaranteed. 1 lb. package, 20c.

TREE TANGLEFOOT. A perfect safe-guard for trees. 1 lb., 60c; 5 lbs., \$2.75; 10 lbs., \$5.25; 25 lbs., \$11.00

**TOBACCO STEMS.** A greenhouse nicotine fumi-gant. Regular bales, 500 lbs.

#### VOLCK

Effective, safe and easy to use. An oil spray for the control of all pests. Can be used on the tender-est plant with absolute safety. Volck is odorless. colorless and non-poisonous. ½ pt. can, 50c; i qt. can, \$1.00; 1-gal. can, \$3.00, not prepaid.



man, livestock, birds and pets. Will not burn or harm tender plants or flowers. Safe and pleasant to use. It stays in solution and won't clog sprayers or corode metal. 1 oz. bottle, 35c; 6 oz. bottle, \$1.00; 16 oz., \$2.00; quart, \$3.50; gallon, \$13.00.



On competitive items and such items on which the price has not been established when this catalog goes to press, we have not quoted, but will ask that you permit us to quote prices on application. Insecticides containing POISON, CANNOT be sent by mail, by express only. Prices quoted are not prepaid unless stated.

A FULL LINE OF DUSTERS AND SPRAYERS WILL BE FOUND ON PAGE 54.

# **INSECTICIDES** (CONT.)

Ants destroyed. New method "gets" them at their sourcesafe, permanent, effective. The Antrol system is adapted to any size house or garden and quick-It is

ly destroys all species of sweets-eating ants. composed of small glass contain-ers and a special formula of syrup. The containers are partially filled with syrup and placed about the outside edges of the house or along "ant" trails in the garden if the in-festation occurs there. The ants smell the syrup, eat it and then transmit its mild poison to the queen in the nest. Soon the entire ant colony is destroyed. The complete system should cover every 15 feet around the outside of the house of "ant" trails





in the garden. Once installed, permanent, effective and safe protection is insured from these annoying pests.

Antrol sets containing 4 Prices: containers and 1 4-oz. bottle of syrup, 95c. Antrol extra containers, 15c each. Antrol syrup, 4-oz. bottles, 45c, not postpaid.

### The Dr. Hess Line

Promotes health and thrift in stock and poultry.

- POULTRY PAN-A-MIN (Panacea). Gives good health and good feeling to your flock. It starts the eggs and keeps them coming. 3-lb. pkg., 50c; 7-lb. pkg., \$1.00; 15-lb., pkg., \$2.00; 25-lb. pkg., \$3.00.
- STOCK TONIC. More milk from your cows, more pounds of pork, and ailing animals made healthy. 5 lb. pkg., 75c; 15-lb. pkg., \$2.00; 25-lb. pkg., \$3.00.

**INSTANT LOUSE KILLER.** Kills lice, ticks, fleas, bugs and slugs. Use it on poultry, animals and vegetables. 1-lb. pkg., 25c.



**DIP & DISINFECTANT.** Destroys hog lice, mites, fleas, ringworm, ticks, scab, etc. The cheapest and the best. 1 qt., 60c; ½ gal., \$1.00; 1 gal., \$1.75.

- **POULTRY TABLETS** (Formerly Roup Tablets). 100 tablets, 50c; 225 tablets, \$1.00.
- TABLETS CHICK (Formerly White Diarrhoea Tablets). 100 tablets, 50c; 225 tablets, \$1.00.
- FLY CHASER. Has the odor of the pines. More milk, more beef, better working animals. ½ gal., 90c; 1 gal., \$1.50.

TANGLEFOOT STOCK SPRAY. For dairy and gen-eral farm use. Repels and kills flies and insects which annoy or irritate stock. 1-gal. can, \$1.50.

EW-BOVINOL. A product of the Standard Oil Company (Indiana). Keeps cows comfortable. 1-gal. can, \$1.50. **NEW-BOVINOL.** 

Quickly kills garden pests. Science provides new safe methods that does the work without cutworms, sowfuss;

bugs, slugs, snails, ear-wigs, grasshoppers, etc., **The National Pest Control** are exterminated. Snarol is a ready prepared meal that you simply broadcast on the ground, under the vegetation. These pests eat the meal and are



quickly destroyed. Snarol will not deter-

iorate from rain or sprinkling and also is non-injurious to vegetation when used according to simple directions. These fea-tures distinguish it from ordinary con-trols and make Snarol popular with pro-fessional gardeners and nurserymen.



Price, 1-lb. package, 45c, not postpaid.



Used as я disinfecting white wash in cellars, henhouses, barns. Dusting Carbola on plants, shrubs, gar-dens for var-

has proven successful. 5-lb. box, 75c; 10-lb. box, \$1.25, not postpaid. The Carbola Duster is listed on page 54.

- SEMESAN. A mercuric seed disinfectant and plant off of seedlings and disinfecting seed bed soil. 2 ozs., 50c; 8 ozs., \$1.60; 1 lb., \$2.75, not prepaid.
- SEMESAN JR. A superior disinfectant for seed corn. 4-oz. tin, 50c; 1 lb., \$1.75.
- SEMESAN BEL. EMESAN BEL. An instantaneous dip for seed potatoes. 4-oz. tin, 50c; 1 lb., \$1.75; 5 lbs., \$8.00.
- ERESAN. A dust disinfectant for wheat, oats, barley and certain other cereals. 8-oz. tin, 50c; 1 lb., 75c; 5-lb. tin, \$3.00; 25-lb. pail, \$12.50. CERESAN.

Du Bay seed disinfectants are poisonous, and owing to present postal regulations. cannot be sent through the mails, but must be sent by freight or express.

Illustrated booklets on the use of these disinfectants may be had upon request.

### Gator Hide Mulch Paper

A new method of planting that produces bigger, better, and earlier crops. Eliminates practically all cultivating and weeding. It will in-crease crop yield. It will enable you to harvest crops from one to the weeks carpier them upmulched two weeks earlier than unmulched crops in your neighborhood. Made in two types and two widths.



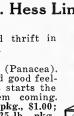
Type A-for ANNUALS-primarily in field culture: 

Type B-for PERENNIALS in field culture and ALL garden work:

18" width—450 linear feet to the roll .........\$3.50 36" width—900 linear feet to the roll ...........7.00

Ask for your copy of the booklet "The Miracle of Mulch Paper," mailed free upon request.

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# **Skinner Irrigation Equipment and Supplies**

### **Skinner Irrigation Equipment**

In buying irrigation equipment, as in buying any piece of machinery, attention should be given to the details of design and construction that are indicative of good equipment.

The Skinner System is one of the most improved methods of irrigation, and is used outdoors on gar-dens, lawns, etc., as well as for greenhouse work.

### Skinner Supplies

Model A drilling machine\$11.70Model B drilling machine14.70Large tap drills, 5-16-24, each.65

No. E-Inlet 1 in., outlet 3/4 to 1 in. Tee Cross unions ....\$2.50 \$2.95 3.75 4.65No. S--Inlet 2 in., outlet 2 in. unions.... 4.85 5.85





ST50

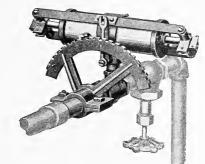


Silver Stream Nozzles.

Indeer Nozzle.

Silver Stream outdoor nozzles, each\$0.06
Silver Stream indoor nozzles, each
Greenhouse nozzles, ST-50, 10 ft. throw, each10½ c
3-4 Automatic flush valves 2.25
No. 34 inch flush valves 1.25
No. 1 strainers for 1-inch union
No. 2 strainers for 1 <sup>1</sup> / <sub>2</sub> -inch union
Small quick acting coupling, 34 in
Small quick acting coupling, 1 in 1.25
Shut off end nozzles
Non shut off end nozzles
Brass turning unions, 34 in 2.50
Brass turning unions, 1 in 3.00
Nipples for 1 in. unions
Caps for unions, 1 in
Caps for unions, 1¼ in

### **Automatic Oscillators**



It simplifies watering. All you do is start and stop the motor. Price, \$25.00, plus cost of brass turning union required.

The March Roller Bearing Pipe Carrier is always tight on the pipe, and eliminates reaming the pipe support when in-stalled. This special fastening on the pipe is found only on our hanger. The pipe is found only on our hanger. The roller bearing pipe carriers are for three types of support; wood post, iron pipe, and wire or cable for greenhouse work. these hangers are solid brass non-tipping rollers, with double bearing axle through



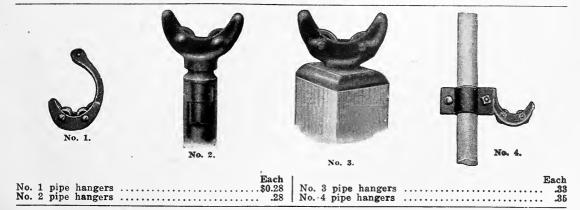
the roller. A roller that can't rust tight and cut your pipe. Price, each, 42c.

> March Greenhouse Nozzles give a fine misty spray with big coverage. They will not drip or puddle due to our

our Greenhouse baffle design. The March field Nozzle. nozzle gives you a real water-

ing job. The holes need not line up ex-actly as with other nozzles. Just bend the tip and get your water streams in line. These nozzles are made of solid brass.

a 1		Each
Greenhouse no	ozzle, not sc	reened\$0.08
		ed13
Field nozzle, s	screened	

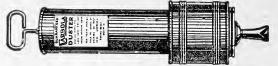


Field Nozzle.

We would like to have you call and see us about this system. Tell us your plans, All prices quoted on this page f. o. b. Grand Rapids.

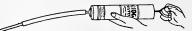
### GRAND RAPIDS GROWERS, Inc., Grand Rapids, Michigan

The Carbola Duster is the last word in dusters. The nearest thing to the Carbola Duster sells for \$2.00. This costs but \$1.25.



The Carbola Duster is 17 inches long and is enameled by a special baking process. It holds an ex-ceptionally large quantity of powder and has a large screw cap that is easy to open and close. There is no part that can wear out, and this duster will last a lifetime with ordinary usage. It is adapted for dust-ing all dry powders, insecticides and fungicides. Price, \$1.25.

### No. 1—Special Hand Duster



For Applying Cyanogas A-Dust Price, \$1.00 each. A small hand duster for applying Cyanogas A-Dust

to rat holes, groundhog burrows and mole runways. Provided with rigid and flexible extension tubes to facilitate application of dust on small rat and mole infested areas. This duster may also be used with any insecticide dust, by removing the extension tube.

### Brown's Auto-Spray No. 50

The same high quality ma-terial and workmanship as No. 9 but with smaller tank capacity. Holds 2½ gallons and is a very convenient machine for women. Handles all spraying solu-

tions at high pressure and is recommended for small trees, truck and home gardens, vines, chicken houses, etc. Pump has all metal check valve and is of one piece seamless brass. Every sprayer is equipped with 18" brass extension with elbow for spraying under side of leaves. A complete and thorpractical oughly sprayer.

Each

....\$6.00

Galvanized tank ..... Brass tank ..... 9.00

### Auto-Spray No. 5

It's double acting. The same spray with half the labor. Can be used with either pail or bucket. The pump is made of solid brass and equipped with an extension strainer and suction hose. This sprayer is equipped with extra nozzle caps to give both fine spray and long distance spray

for spraying trees from the ground. Auto Spray No. 5, each, \$5.00.

### Auto-Spray No. 6

Is a very powerful bucket pump, easily generating pressure of over 200 lbs. The extension handle and foot rest are of malleable iron. Pump and plunger made of seamless brass tubing. Hose is %" diameter, 5 ply. Auto Spray No. 6, each, \$4.75.



Auto-Spray No. 9 with the corrugated tank is the most modern and up-to-date sprayer on the market. Will handle all spraying solu-Recommended for tions. small trees, field and garden crops, poultry houses, vines, etc. Has all the Brown improvements. Extra strong corrugated tank, both brass and galvanized. 22-inch brass extension, non-clog nozzle with 3 sizes brass



nozzle discs for different sprays. Air pump one piece solid brass, check valve all brass—no rubber or leather, cannot rust or deteriorate. Hole in bottom flange to hang sprayer upside down for complete drainage. All these improvements at no extra cost. The best sprayer that money can buy.

	Lach
Galvanized tank	\$6.75
Galvanizeu tank	10 50
Brass tank	10.50

### "The Whirlwind"

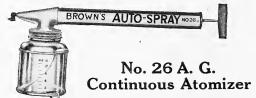
"THE WHIRLWIND" is a strong, well balanced single acting sprayer. Capacity of reservoir is 1 quart. Pump is 12" long, and 1%" in diameter. Pump barrel is lithographed. The dome filler cap screws into a brass filler thread. This brass connection noticeably increases the life of this sprayer. Whirlwind, 1 quart, all tin, each 50c.



### Twin Blast Atomizer

This glass reservoir single act-

This glass reservoir single act-ing double jet atomizer is pow-erful and efficient. Pump 1¾" diameter, 18" long. The double siphon tubes throw a large blast of fine spray. Excellent sprayer for cattle fly spray and all around spraying. Drip cup in can top. Jar has Mason thread and any fruit jar can be used. Metal parts are of extra heavy tin plate. Brown's Twin Blast, one quart. each 75c. Twin Blast, one quart, each 75c.



No more ruined sprayers because of rusted or corroded tanks. This glass tank continuous atomizer is the newest and most practical sprayer of its kind. The jar has standard Mason thread and any fruit jar can be used. Operator can always see the exact amount of liquid in the reservoir and wide mouth opening makes easy filling and cleaning. Sprays on both up and down stroke and maintains a constant mist with very little effort. Strongly made and will last for years Lithgeraphed tin pump glass iar last for years. Lithographed tin pump, glass jar tank, one quart, price \$1.25 each.



### 1930PLEASE USE THIS ORDER SHEET

## GRAND RAPIDS GROWERS, Inc. Grand Rapids, Michigan

### Please Forward the Following to

(Write name and address very plainly.)

Name .....

R. I

Post Office

### How to Send Remittance

Never send Bills or Currency in a Letter. If necessary to do so be sure to REGISTER IT. The safest form of remittance is a Check, Post Office or Ex-press Money Order.

#### AMOUNT ENCLOSED

R. F. D. No Box NoStreet	
	Date
Express Office	P. O. Order
Freight Depot	Express Order
	Check or Draft
County	Cash
HOW SHALL WE SHIP? State on this line whether by Mail, Express or Freight.	Stamps
If to be sent by Mail be sure to include Postage on goods not quoted postpaid. See first	Total

GRAND RAPIDS GROWERS, Inc. gives no warranty, express or implied, as to description, purity, productiveness or any other matter of any seeds, bulbs or plants they send out, and they will not be in any way responsible for the crop. If the purchaser does not accept the goods on these terms, they are to be returned at once.

Quantity	NAMES OF ARTICLES WANTED	Price	
•			

IF MORE ORDER BLANKS ARE WANTED, WRITE US AND WE WILL SEND THEM. MAIL ORDERS ARE SOLICITED.

### **ORDER SHEET**—Continued

Quantity	NAMES OF ARTICLES WANTED	Price	,
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8			
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SPECIAL NOTICE:

We shall esteem it a great favor if you will give us in the spaces below the NAMES AND ADDRESSES of any Private Gardeners or Truck Farmers among your acquaintances. We wish to send them our SEED ANNUAL.

NAME	POSTOFFICE	COUNTY	STATE
·	-		

# 10% Discount Given

To become better acquainted with our GARDEN SEEDS, we offer to give you 10% discount on your orders during the year.

Our garden seeds have been giving satisfaction since we have been in business, as our aim is, and always will be, to give you the best seeds obtainable; they have been carefully grown, selected, cleaned and tested for germination.

In making up your order, simply deduct 10% as your saving. This offer applies only on vegetable and flower seeds at the prices quoted in this catalog, and when your order amounts to \$1.00 or more; however, special collection offers and bulbs are not included.

Your remittance must accompany your order to entitle you to the discount.

We will appreciate your valued orders which will have our best attention at all times.

Faithfully yours, GRAND RAPIDS GROWERS, INC.

# Flower Seeds

Pages 31 to 44 have been devoted to flower seeds, but to acquaint you with some of the latest additions to our stock we give you below just a few annuals that are worthy of your consideration.

### Baby's Breath (A)

### (GYPSOPHILA)

Graceful plants of fairy-like growth. Large flowering, pure white of free, easy growth. Much in demand for cutting and combining with other flowers for bouquets and vases. Several sowings should be made during the season to keep up the supply. Oz., 30c; 1/2 oz., 20c; pkt., 10c.

### American Beauty Aster (A)

Late flowering. Plants are of branching habit, commencing to bloom in early Septem-ber and lasting until destroyed by frost. Flowers are large, borne on long and stout stems from 18 to 24 inches, making them most desirable for cut flowers. Mixed colors. 1/4 oz., 60c; pkt., 10c.

### Lavender Gem Aster (A)

The flowers are of a true lavender shade and the petals are gracefully curled and twisted, and the blooms are borne on long, firm stems. Grows about 18 inches tall. <sup>1</sup>/<sub>4</sub> oz., 60c; pkt., 10c.

### Salpiglossis (A)

Undoubtedly one of the most attractive an-Undoubtedly one of the most attractive an-nuals and should be in every garden. The blossoms are tube-shaped, much like a Petu-nia, but rivaling the latter in the beautiful colors displayed. Nearly every flower is veined with a glint of gold, and it is the only flower to our knowledge possessing this odd characteristic. The flowers are large and her woll in water nearly better then when on last well in water, really better than when on the plants.

Gloxiniaeflora Mixed. 1/4 oz., 40c; pkt., 10c.

### Lobelia (A)

COMPACTA. This charming class forms compact little bushes about six inches high and are fairly sheeted with bloom throughout the season. Very pretty and highly desirable for edgings, ribbon bedding and garden dec-oration as well as for pot culture. Mixed colors. ¼ oz., 30c; pkt., 10c.

While we do not put out packet seeds, we do, for our packets of flower seeds out of our bulk seeds, and you can rest assured that all of our seeds are thoroughly tested for vitality as well as germination and the varieties of annuals that we offer will add to the charm of any garden, enhancing both garden, enhancibeauty and color. both



# Grand Rapids Growers, Inc.

Seed Merchants

401 - 411 Ionia Avenue, S. W. GRAND RAPIDS, MICH.